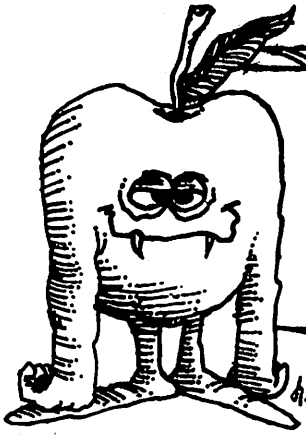

NORTHERN ILLINOIS APPLE USERS GROUP

$2.50

THE HARVEST

VOL5-NO. 6

JULY 1984

MEETING DATE Aug 4, 1984

10:00 am-1:00 pm Building A, Harper College

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Vice-President—	Jim Glore	312-843-3215
Treasurer—	Jim Murphy	312-449-3139
Secretary—	Ken Rentfleish	
Librarian—	Joe Zeinz	312-526-0575
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Program Chairman—	Jim Glore	312-843-3215
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Beginners SIG Co-ordinator—	Guy Lyle	312-359-1458

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Beginners——————Al Guthrie

Education/Book Reviews——Sheldra Horwitz

SIG News——————Ken Falter

Graphics——————Pat Richter

Interesting Bits————Chris Tufts

Labels——————Loren Avenson

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305 Honeysuckle,
Island Lake, Il,
60042
312-526-0575

BULLETIN BOARD------ 312-295-6926 24 hrs
SYSOP-Dave
& Joel Alpert

CORRECTIONS/CHANGES OF ADDRESS

Corrections/changes of address MUST be sent to the club secretary. Mailings are by bulk presorted third class mail. Any incorreect addresses will usually result in missed issues.

Membership is open to all. Dues are $24.00 annually with a one time initiation fee of $5.00 at the time of admission. Membership applications are available from the club Secretary at the meetings or by mail.

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SUBMITTING ARTICLES

Handwritten articles are acceptable but articles on disk are preferred. Articles on a disk should use one of the following word processors: Easywriter, Applewriter, PIE or Magic Window. Use a 0 left margin and a line length of 47 characters for Easywriter and 41 for all others. Fill and right justify all text. Also supply a hard copy of the article for proof reading purposes. If your article includes a program listing please submit it on disk unless you have a printer that uses carbon film ribbon. All disks will be returned at the meeting unless requested to do otherwise.

MEMBERS AIDE

The members listed below have volunteered to answer questions from club members who need a "HOTLINE" type answer that can be handled over the telephone. Please try to be brief as a courtesy to them. PLEASE NO CALLS at dinner time or after 10 pm.

ADDITIONAL VOLUNTEERS REQUIRED TO FILL OUT THIS MEMBER SERVICE. IF YOU FEEL QUALIFIED IN ONE OF THE SUBJECTS BELOW PLEASE CALL THE EDITOR TO HAVE YOUR NAME ADDED TO THE LIST.

GENERAL	Paul Stadfeld	312-359-2378
TECH NOTES	Joe Zeinz	312-526-0575
BULLETIN BOARDS	Joel Alpert	312-295-6078
COMMUNICATION PACKAGES & MODEMS/TELECOM		
Apple Cat II	?	?
DC Hayes Micromodem	Joel Alpert	312-295-6078
	Tony Antonucci	312-282-8436
	Rich Lundeen	312-420-8468
DC Hayes Smartmodem	?	?
ASCII Express	Joel Alpert	312-295-6078
	Tony Antonucci	312-282-8436
Z-pro	Tony Antonucci	312-282-8436
Data Capture	?	?
Visiterm	?	?
Source	?	?
HARD DISKS		
Corvus	*Dave Drucker *daytimes	312-541-2124
	Walt Hopkins	815-459-1769
Corona	?	?
COMPILERS		
Tasc	Rich McNeil	312-986-0548
Expediter	?	?
DATA BASES		
dBase II	?	?
DB Master	Max Rubin	312-674-7209
	Natalie Alberts	312-381-1530
Data Factory	Ken Falter	312-259-6474
General Manager	Rich McNeil	312-986-0548
Infomaster	?	?
List Hander	Carl Johnson	312-256-6094
Versaform	?	?
Visifile	?	?
PFS	Byrd Dehinten	312-998-8742
	Rich McNeil	312-986-0548
EDUCATION SOFTWARE	Jim Bradshaw	312-881-7000
GAMES		?
GRAPHICS	Paul Stadfeld	312-359-2378
HARDWARE	Jim Murphy	312-449-3139
8" disk Drives	Tony Antonucci	312-282-8436
ACCOUNTING		
The Accountant	Walt Hopkins	815-459-1769
Home Accountant	Tom Grisko	312-297-0927
Time is Money	Bob Steinberg	312-677-8787
BPI	*Debbie Hauser	312-272-8236
*daytime		
BEGINNERS AIDE	*Rich Lundeen *Applesoft, DOS, VisiCalc	312-420-8468 Assembler
INVESTMENT	John Hoffmann	312-998-0164
INVESTMENT	Jim Bradshaw	312-881-7000
LANGUAGES (A)pplesoft, (I)nteger, (P)ascal, (F)orth, (L)isp, (M)achine code,		
A,I	Ted Rosemann	312-882-7938
A,I	Mary Rosemann	312-882-7938
P	Herb Schulz	312-968-6927
P	*Dave Drucker *daytime	312-541-2124
A,I	Rich Lundeen	312-420-8468
M,A,I	Paul Stadfeld	312-359-2378
M,A,I	Guy Lyle	312-359-1458
M,A,I	Joe Zeinz	312-526-0575
M,A,I	Earl Allen	312-837-9259
A,I,P	Ken Nestle	312-620-7745
A,I,	Jim Murphy	312-449-3139
A,P,C,	Tony Antonucci	312-282-8436
8080, Z80 Assembler	Tony Antonucci	312-282-8436
F	Bob Sullivan	312-383-7785
C	?	?
A,C,Cobol	Loren Avenson	312-259-9433
Fortran	John Kelley	414-354-7656
Logo	?	?
Pilot	?	?
SPREADSHEETS		
Multiplan	William Neurauter	312-980-4785
Microfinesse	*Dave Drucker *daytime number	312-541-2124
LogiCalc	Peter Clarke	312-545-0974
The Spreadsht/Magi-calc	Bob Steinberg	312-677-8787
	Joe Sobel	312-398-1836
Incredible Jack	?	?
VisiCalc	Joe Sobel	312-398-1836
VisiCalc	Jay Toutenhoofd	312-359-1460
OPERATING SYSTEMS		
Apple DOS	Jim Glore	312-843-3215
	Tony Antonucci	312-282-8436
CPM	Tony Antonucci	312-282-8436
UCSD P-System	*Dave Drucker *daytime number	312-541-2124
PRINTERS		
General	Terry Tufts	312-577-7381
Apple Dot Matrix	David Macaulay	312-991-4977
Diablo	Peter Clarke	312-545-0974
IDS	?	?
Epson	Tony Antonucci	312-282-8436
NEC Spinwriter	Beldon Rich	312-272-8236
NEC 8023	Bob Steinberg	312-677-8787
	Rich Lundeen	312-420-8468
ProWriter	Tom Grisko	312-297-0927
Okidata	Peter Clarke	312-545-0974
	*Dave Drucker *daytime number	312-541-2124
WORDPROCESSORS		
Easy Writer	Terry Tufts	312-577-7381
Apple Writer II	Ken Falter	312-259-6474
	Rich McNeil	312-986-0548
Format II	Bob Steinberg	312-677-8787
Gutenberg	?	?
Letter Perfect	?	?
Magic Window	Ed Evenson	312-255-3403
	Rich Lundeen	312-420-8468
ScreenWriter II	Rich McNeil	312-986-0548
	Tom Grisko	312-27-0927
Supertext II	?	?
Apple Pie/PIE Writer	Walt Hopkins	815-459-1769
Word Handler II	Carl Johnson	312-256-6094
WordStar	Peter Clarke	312-545-0974
	Tony Antonucci	312-282-8436
GENERAL BUSINESS		
Stats Plus	Ken Falter	312-259-6474

EDITORIAL

by Terry Tufts

IN THE MIDDLE OF A REVOLUTION

Don't look now but your in the middle of a revolution, if you look carefully you will see the bodies of software and hardware companies littering the landscape, either dead or badly wounded. The bloom is off the microcomputer growth and many formerly successful computer stores are falling on hard times. Grandiose plans for nationwide franchising are being shelved and some fledgling sofware/hardware chains are contracting and in some places silently going out of business.

IBM's recent price reductions on their PC computers has been reflected thruout the industry, putting special pressures on the IBM lookalikes, some of which were having financial problems before reducing their prices. The computer industry trade magazines report large staff layoffs in many of the best known hardware and software companies in the microware. The chances are that many of the software packages that you use will be orphans in the months to come. You Visicalc users could be in that category if Viscorp is unable to reverse its fortunes in the months to come. Both Software Arts which developed Visicalc and Visicorp which market Visicalc are taking each other to court at a time when both are facing uncertain times. They are both claiming rights to and are selling Visicalc to the end user at prices much closer to what I paid for my first Viscalc version 4 years ago.

All of the changes in the industry will inevitably affect us Apple Users even if they are competitors of Apple. Al Guthrie has undertaken the challenge of going through the masses of trade magazines I receive and will try to give you and analysis of the monthly happenings. For fun we will be listing the companies we picks to to miss. If you wish to add your choices to our list send them to Al and we will see how good our collective crystal ball is working.

In addition Al is also combing the news for products announced for the Apple Computers. Chris Tufts is continuing his column on press releases that we receive in the mail.

IN REMEMBRANCE

I have often said one of the big benefits of NIAUG is the many fine people that I meet. Marshall Newcome fit that category in spades. I met him when he and his wife Marlys first attended the forming of the Education SIG. He became a good friend and I always looked forward to getting together with him at those and other meetings. As a team they made many contributions to NIAUG. I am saddened to report that Marshall died of a sudden heart aneurism a few weeks ago. Our sympathy goes out to Marlys and her family in their time of grief.

PRES SAYS.....

16-June-84

Well, we ran out of time. The BY-LAWS should be out next month. The officers are currently reviewing the draft copy, so expect them in the July HARVEST. The vote for approval will be made at the August General Meeting.

The FIRST ANNUAL NIAUG PICNIC is on. From 12 NOON until 6 PM. Date of the picnic is SUNDAY JULY 29th. Sunday August 5th is the rain alternate. Picnic location will be in the Forest Preserve district BUSSE WOODS, which is between Route 53 and Arlington Hts Road on Higgins in Elk Grove Village.

CANCELED

NIAUG will furnish the charcoal and charcoal grills ONLY! It is up to you to bring any food and drink. This is a FOREST PRESERVE, so NO ALCOHOL is permitted! There will be a sign up sheet at the July meeting. We need to know about how many people will be there, so PLEASE SIGN UP. If you can't be at the July General Meeting, and still wish to sign up, call me at home: 537-3856 on weekends, or 7pm-10pm weekdays.

The Answering service has been evaluated, and found wanting. We have notified them of our intent to cancel the contract. They are attempting to fix the problems indicated, but the volume of calls still dictates that we cancel and provide some other form of information phone. At present, we are again looking into an answering machine.

The Annual Program Contest entry form will appear in all HARVEST issues from now until the end of the contest. If you have any original programs, enter them in the contest. You can't win if you don't enter. I don't think my submission of '10 PRINT "HELLO":END' will win, but I could be wrong. If no other programs are entered, maybe.....

Rob Stewart, CDP
President

Interesting Bits

by Chris Tufts

Dual plastic printwheels are now available for Diablo, Qume and C. Itoh daisywheel printers using 96 character plastic printwheels. These ruggedly constructed printwheels last up to 10 times longer and produce a better print quality than conventional plastic printwheels. A printout of the 24 printwheel typestyles is available from Business Support Services, Inc., 705 Butternut Ave., Royal Oak, Michigan 48073.

THE DENTAL-MEDICAL OFFICE DATA is a data base system for physicians and dentists consisting of thirteen programs in which office and personal information can be entered, changed, deleted, sorted, searched, and printed in multiple formats. Among the programs are Appointments, Patient File, Dead Beat File, Employee Records and Text Editor. The system runs on Apple II, IIe and/or compatible computers. The disk is unlocked and modifiable. For further information contact Andent, Inc., 1000 North Avenue, Waukegan, IL 60085.

Literature Analysis of Microcomputer Publications has made available for sale the Annual Cumulative Edition for 1983. A bi-monthly journal, LAMP presently indexes 130 periodicals which deal exclusively with the field of microcomputers. The cumulative edition is printed in two volumes and encompasses thousands of subject and author entries, thousands of reviews of books and periodicals, hardware and computer systems, educational software and video games, and information on all phases of microcomputers. The 1983 year-end issue is available to non-subscribers at $69.95. Or subscribe to LAMP for 1984 at the regular annual rate of $89.95 and take advantage of the special offer of $39.95 for the 1983 cumulative edition. For a brochure describing LAMP, call toll free 800-526-9042 or write LAMP/Soft Images, Brochure Dept., 200 Route 17, Mahwah, N.J. 07430.

Double-Gold Software has introduced Lock-It-Up diskette copy-protection systems for the IBM-PC, Apple II and Macintosh computers. These systems are menu-driven and allow the implementation of several levels of security

which render standard diskettes virtually uncopyable by even the most sophisticated of pirating methods including the use of advanced nibble copy programs. The protection is based upon an encrypted signature track which is written to a random location on the diskette. Since the protection is not based upon a physical "fingerprint", complete write-protection of information is possible. The protection will not interfere in any way with the normal operation of the software which is protected. The systems include a software duplication system which allows the protected diskettes to be duplicated rapidly for commercial purposes. The duplication system is compatible with the Mountain Computer Autoloader. If large scale duplication is required, Double-Gold's protection formats are supported by most duplication equipment manufacturers and diskette duplication firms. Licensing of Double-Gold's protection systems begins at $495. Contact Double-Gold Software, Inc., 3900 Moorpark Ave., Suite 29, San Jose, CA 95117. (408) 554-9133.

Interactive Microware, Inc., announces the availability of VARICALC, a program for the Apple II series computers that interactively solves science, engineering and business equations. VARICALC can simulate complex physical, chemical or mathematical processes as well as accept real-time input directly into a predefined model. VARICALC uses "variators" to change variables interactively. The variators can be the game paddles, a joystick, or the left and right arrow keys. This permits feedback control of real time processes according to complicated control equations. VARICALC will solve for any one of 19 variables on the right or left side of a formula without rearranging the formula. Results can be plotted on the Apple Computer's high resolution graphics screen or you can print hard copies of the graphics screen or any text screen. Up to 255 equations may be stored on disk for quick recall. The VARICALC software is available for $100 (price includes disk and instruction manual). The VARICALC manual is available separately for $5, and the price is deductible if software is purchased later. For further information, contact Interactive Microware, P.O. Box 139, State College, PA 16804-0139 or call the IMI Sales Department at (814) 238-8294.

Interactive Microware announces the availability of QUICK-DRAFT, a computer-aided design program for APPLE II series computers. QUICK-DRAFT can be used for a variety of tasks, including architectural designs, bar graphs, circuit diagrams, flow charts and schematics. The APPLE keyboard, a joystick or a KoalaPad graphics tablet can be used to draw on the high resolution screen. With a few keystrokes, you can draw ellipses, circles, arrows, or predefined shapes in any size, rotation or color. Any closed region can be filled with one of 22 colors. Complicated designs may utilize 2 screens (48K version), 4 screens (64K version), or up to 30 additional screens with extended RAM memory. QUICK-DRAFT prints upper and lower case text in 19 different alphabet fonts. A "macro" facility permits definition of as many as 20 objects, each consisting of many lines, figures, text, etc.; these objects can be redrawn anywhere on the screen and saved on disk for later use. Hard copies of any screen or of four contiguous screens can be printed on many dot matrix printers. An optional companion program, QUICK-SHAPE, facilitates creation of custom shape tables. Shapes can be edited by enlarging any region of the hi-res screen to two or four times normal size. Large shape tables containing up to 127 shapes can be generated for use with QUICK-DRAFT. The QUICK-SHAPE disk also includes 13 proportionally-spaced text fonts and shape tables for mathematics, music, electronics, and more. QUICK-DRAFT software is available for $50 (price includes disk and instruction manual). QUICK-SHAPE is $25 additional. For further information, contact Interactive Microware, P.O. Box 139, State College, PA 16804-0139 or call IMI's Sales Department at (814) 238-8294.

MEETINGS, MEETINGS, MEETINGS

by Jim Glore

The meeting topics for the first nine months of this year have been fun for me to plan and I want to thank all who have been or will be involved. So far, I have more or less indulged myself on topics I thought would be interesting or which were brought up at the Planning Meetings the Tuesday following the main meeting (usually). Now my brain is getting a bit threadbare and I also wonder if there are some hot topics I haven't thought of that you are interested in. I would welcome your INPUT on what you would like to see/hear at the Oct-Dec meetings. People who would like to PRESENT a topic at one of these meetings are more than welcome to respond. Perhaps it's your favorite program or some new (or old) peripheral you are familiar with. Don't be shy because you feel that you don't know enough to stand in front of the group — think about that for a minute. If you feel less than expert and you come to the meetings, multiply yourself by about 200. That's how many people also feel the same way you do. We are not all experts by any means. Nay, most of us are rank amateurs and can benefit from your experience. So your audience will be receptive and appreciative. Where else can you get such a good deal? Give it some thought and if you want to give a presentation, get in touch with me. If you don't feel comfortable doing it yourself but you have an idea for a topic, let me hear from you anyway. It's your club... get involved.

ODDS & ENDS, EVENS & MEANS

by Jim Glore

This quasi-regular column is intended to ramble over the entire range of Apple trivia from PEEKS to POKES, from odds to evens, from ends to means on the theory that one man's trivia is another's treasure.

Did you ever have a hunk of code that you wanted to use first in your main program and later refer to as a subroutine? Well, you can if you end the lines in question with: IF SUB=1 THEN RETURN. Then when you want to access the lines as a subroutine, call it like this: SUB=1:GOSUB nnn:SUB=0. Gee, why didn't I think of that?!

Need to read the game paddles from a machine language program? It's easy. Just load the x-register with the paddle value (0,1,etc.) and JSR $FB1E. When you return, the y-register has the paddle value.

Or maybe you want to include a short (less than ca. 240 bytes) machine language program in your Applesoft program. Just make the first line in your program REM ******** ... with as many stars as you have bytes. Then enter the code at $806. This overwrites the stars. When you are done, you can save the program with machine language as part of the BASIC. To use the machine language, just CALL 2054.

Gee, I didn't know that dept. Did you know that the FID program on the DOS 3.3 master works just fine on DOS 3.2?

You can add 32 sectors of file storage space to any disk easily if you write on top of the disk DOS image. THIS DISK WILL NOT BOOT, but you will have extra room. Just POKE 46922,96: POKE 46923,234: POKE 46924,234: POKE 44723,4. Then INIT a new disk which will store 528 sectors of information instead of the standard 496. Be sure to mark any disks you set up like this so that you know that you have to boot DOS from some other disk which has DOS on it. Also, note that until you either change the POKES from above by hand or boot up a standard operating system, all disks INIT'ed will have this feature.

Puzzle of the month (FP)

```
10 X=1
20 POKE 36,55:  PRINT"55"
30 END
```

Now RUN, LIST, RUN, LIST. Fun!!!

Proposed BY-LAWS June 4, 1984

Northen Illinois Apple Users Group, Inc.
NIAUG

Article 1: NAME
The name of this organization shall be 'Northen Illinois Apple Users Group, Inc.'. The organization name may be abbreviated to 'NIAUG'.

Article 2: PURPOSE
NIAUG shall be incorporated in the State of Illinois as a NON-PROFIT corporation. The primary purpose of this organization shall be to serve the best interests of the membership, to assist in distribution of information as it pertains to computers, and to provide the support structure for educating the membership with regard to computers. Methods to accomplish this purpose shall consist of, but are not limited to, Meetings, a Disk Library, a Paper Library, Special Interest Groups, and a Newsletter.

Article 3: PROHIBITED ACTIVITIES
No part of the net earnings of NIAUG shall inure to the benefit of or be distributable to its members, directors, officers, or other persons, except that NIAUG shall be authorized and empowered to pay reasonable compensation for services rendered, and to make payments and distributions in futherance of the stated purposes of NIAUG as set forth in Article 2.

NIAUG shall not participate in any way in any political campaign on behalf of any candidate for public office.

No member, director, or officer of NIAUG shall be financially interested, directly or indirectly, in any agreement relating to the operations of NIAUG, nor in any transaction for providing services, facilities, or supplies to NIAUG for compensation, UNLESS the fact of such interest be known to the BOARD of DIRECTORS, AND UNLESS such agreement or transaction shall be authorized by a majority of the DIRECTORS who have no interest, direct or indirect, in such agreement or transaction.

It shall be the permanent policy of NIAUG that this organization shall protect the interests of copyright holders, and shall prohibit the theft or piracy of copyrighted material by any member. Proof of theft, by any member, shall result in the IMMEDIATE AND PERMANENT EXPULSION of the member from the group.

Article 4: OFFICES
The official mailing address of NIAUG shall be 1271 West Dundee Road #25A, Buffalo Grove, Illinois 60090. The BOARD may maintain additional offices, at other locations, or change the official mailing address provided all required notifications are made. The BOARD of DIRECTORS may contract for the use facilities and services as it sees fit to further the stated purposes of NIAUG or to reduce the workload of directors.

Article 5: MEMBERSHIP
Membership in NIAUG shall be open to all persons interested in Apple or Apple compatible computers, or in ANY computers of any kind.

There shall exist the following membership categories:

a) FULL FAMILY MEMBERSHIP

Full members shall pay annual dues and shall be entitled to participate in club activities, attend meetings, purchase disks of PUBLIC DOMAIN software from the Disk Library, have access to the Paper Library, and receive the NIAUG newsletter. A FULL FAMILY MEMBERSHIP shall include all members of the listed members' immediate family. The Full membership shall have 1 and only 1 vote, regardless of the size of the family.

b) ASSOCIATE FAMILY MEMBERSHIP
Is available to families who live outside the area serviced by the NIAUG general meetings. Associate members have all rights of FULL membership, EXCEPT they have NO VOTING RIGHTS. General Meeting Service Area will be established by the BOARD of DIRECTORS, and may be reviewed and ammended at the end of each fiscal year.

The BOARD OF DIRECTORS shall have the right to create other NON-VOTING membership classifications as they see fit. Membership dues shall be established by the BOARD OF DIRECTORS of NIAUG, and set forth in the NIAUG Policy Manual.

New or expired members are subject to an initiation fee established by the BOARD of DIRECTORS.

Any FULL member in good standing shall have the right to vote, to participate in all 'GENERAL' and 'PLANNING' meetings, and to run for, and hold office in NIAUG.

Except as otherwise specified in these BYLAWS, no member shall act in the name of NIAUG or take any action which would bind NIAUG.

Any member may resign from membership in NIAUG by submitting a written resignation to the Secretary of NIAUG, but members shall not be entitled to a refund of any portion of dues paid prior to such resignation.

A member may be expelled from membership in NIAUG for : a) failure to pay dues for more than thirty (30) days after due date thereof, or b) engaging in any activities prohibited by these BYLAWS or policy or rule of practice adopted by the BOARD of DIRECTORS. Before any member may be expelled (excepting for non-payment of dues) written charges specifying the alleged cause shall be filed with the Secretary and a copy of said charges shall be served on the member charged. The member charged shall be given the opportunity to correct such conduct. If the member continues to engage in prohibited activities, he may be expelled at any subsequent meeting of the BOARD of DIRECTORS by an affirmative vote of two-thirds of those DIRECTORS present and voting.

Article 6: BOARD OF DIRECTORS
SECTION 1 - POWERS. The business and affairs of NIAUG shall be managed by its BOARD OF DIRECTORS, which may exercise all powers of the Corporation and perform all lawful acts in accordance with the stated purposes of NIAUG.

SECTION 2 - COMPOSITION. The BOARD OF DIRECTORS shall consist of a minimum of 11 members: the President, Vice-President, Secretary, Treasurer, Librarian, Editor, and at least five (5) HONORARY DIRECTORS-AT-LARGE. The Directors-at-Large shall be appointed by the President upon the Presidents' assuming office. If an individual is entitled to serve on the Board of Directors by virtue of election or appointment to more than one position, then such individual shall be entitled to only one vote and the President may appoint another individual to the second and lesser Directorship position. Number of Honorary Directorships shall be subject to modification by the

BOARD, but shall never be less than three (3), nor more than nine (9).

SECTION 3 - TERM. Appointed Directors-at-large shall serve for one year beginning on January 1.

SECTION 4 - REMOVAL. An appointed Director may be removed at any time, with or without cause, either at a GENERAL MEETING, a PLANNING MEETING, or at a SPECIAL MEETING called for such purpose. Removal shall require a two-thirds vote of DIRECTORS present.

SECTION 5 - VACANCIES. Upon the resignation or removal of a DIRECTOR-at-LARGE, the BOARD of DIRECTORS may, by majority vote, appoint a member to serve for the remainder of the Director's term.

SECTION 6 - REGULAR BOARD MEETINGS. Regular meetings of the BOARD of DIRECTORS shall be help monthly at the PLANNING MEETING, unless otherwise determined by the BOARD of DIRECTORS.

SECTION 7 - SPECIAL BOARD MEETINGS. Special meetings of the BOARD of DIRECTORS may be called by the President, the Vice-President or by two or more Directors on seven (7) days notice, if said notice is delivered personally, by telegram or by telephone or on fourteen (14) days notice if delivered by mail or by publication in the NIAUG Newsletter. No business other than that stated in such notice shall be conducted.

SECTION 8 - CONDUCT OF MEETINGS. The President, or in his absence the Vice-President, shall preside at all meetings of the BOARD of DIRECTORS. The Secretary or such other person as the presiding officer may appoint, shall act as the Secretary of the meeting. A majority of the OFFICERS currently in office shall constitute a quorum. Honorary Directors, if present, shall have the same rights as those of elected directors, they are not however counted to determine satisfaction of the quorum requirements. Meetings of the BOARD of DIRECTORS shall be open to all NIAUG members, except that upon majority vote, the BOARD of DIRECTORS may enter EXECUTIVE SESSION to transact business which the BOARD determines to be confidential.

SECTION 9 - ACTION BY CONCENT or BY TELEPHONE. Any action required or permitted at any meeting of the BOARD of DIRECTORS may be taken without a meeting, if a written consent to such action is signed by all members of the BOARD of DIRECTORS, and such written consent is filed with the minutes of the proceedings of the BOARD. The BOARD of DIRECTORS may participate in a meeting by means of a conference telephone or similar equipment such that all Directors can each hear the others. Participation by such communication equipment shall constitute presence at such meeting.

Article 8: OFFICERS

Elected officers of NIAUG shall be: President, Vice-President, Secretary, and Treasurer. In addition to the four elected officers, there shall be two other officers which shall be appointed. Appointed officers of NIAUG shall be: Disk Librarian, and Newsletter Editor. It shall be the duty of the President to appoint the LIBRARIAN and EDITOR.

Nominations for the elected offices shall be OPEN and taken at the GENERAL MEETING held in the month of OCTOBER. Nominations shall be published in the NIAUG newsletter delivered to the membership in the month of NOVEMBER. Nominees shall be granted (upon request) up to 10 minutes of GENERAL MEETING time to promote their candidacy at the NOVEMBER GENERAL MEETING, and up to one half page of newsletter space in the NOVEMBER newsletter.

Election of officers will take place at the DECEMBER GENERAL MEETING, and may be held by voice vote of members present. Paper balloting may be requested by any member at the DECEMBER meeting, but if provisions have not been made for a paper ballot, responsibility for supplying ballots shall fall on the requesting member(s). If ballots have not been provided, election will revert to voice vote.

Officers shall be eligible for re-election.

All officers shall be subject to review and recall by petition of 25% of members, or by 60% majority of members present at any GENERAL meeting.

If the office of President, Vice-President, Secretary or Treasurer becomes vacant for any reason, then the BOARD of DIRECTORS shall be required to fill the vacancy. If the office of LIBRARIAN or EDITOR shall become vacant for any reason, then the president shall be required to fill the vacancy. Any officer or director selected, apponted, or elected to fill a vacancy shall hold office until the election and qualification or appointment of his successor.

Article 9: OFFICER's DUTIES

PRESIDENT shall preside over all GENERAL, PLANNING, and SPECIAL officer meetings. President shall be responsible for calling all meetings to order at appointed times and adjournment at close of meeting. President shall be required to make regular submissions to the newsletter discussing current club business and policy.

VICE-PRESIDENT shall perform the duties of the PRESIDENT in his/her absence, or inability to serve, shall be responsible for planning GENERAL meeting agenda's, and other duties as assigned by the BOARD with the consent of the VICE-PRESIDENT.

SECRETARY shall be responsible for all official correspondence of NIAUG, meeting minutes of any GENERAL, PLANNING and SPECIAL meetings, changes to policy, or any official decisions or actions taken by the BOARD. Meeting minutes shall be submitted to the newsletter for publication. Secretary shall also be responsible for updating the member list, and supplying same to the DIRECTORS as needed.

TREASURER shall be custodian for all funds of NIAUG. His/her name and the name of at least one other officer shall be required for authorization of all checks above $250. 'Request for Payment' forms shall be required for payment of all bills. The names and signatures of all ELECTED officers shall be on file with any financial institution where NIAUG funds are deposited. Accurate records of the fixed and liquid assets of NIAUG are his/her responsibility to maintain. Records of expenditures of all monies shall be kept and a report given at PLANNING meetings. A condensed report shall be submitted for publication in the newsletter.

DISK LIBRARIAN shall be appointed by the President, shall maintain the NIAUG Disk Library, make additions or deletions of programs or whole disks, and insure that only PUBLIC DOMAIN programs are available within the library, or that NIAUG has a specific release for any and all programs not in the public domain. He/she shall prepare a DISK LIBRARY INDEX for publication on a yearly basis; sell copies of library disks at all GENERAL meetings, and thru the mail (if possible); manage maintenance of the paper library materials.

NEWSLETTER EDITOR shall be appointed by the President, shall be responsible for the timely publication of the NIAUG newsletter. The newsletter shall serve as the basic communication medium with all members. All official notifications shall be placed in the newsletter immediately. The editor shall maintain those lists necessary for distribution of the newsletter (except the member list), and in all ways manage the production, publication, distribution, expenses, and revenues of the newsletter. A report shall be given at each PLANNING meeting, and a condensed report published in the newsletter.

All officers may obtain assistance in any non-critical or non-official task.

Article 10: FISCAL YEAR
For all accounting and tax purposes, the fiscal year shall run from November 1 to October 31 of the following year.

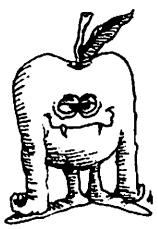
Article 11: MEETINGS
GENERAL meetings shall be held on a date established by the BOARD. Frequency of GENERAL meetings shall be monthly, except upon special circumstances which the BOARD shall deem in the best interests of NIAUG to cancel a monthly meeting. Notification of GENERAL meeting schedule and agendas shall be published in the newsletter and distributed to interested people and companies as agreed to by the BOARD.

PLANNING meetings shall be held following a GENERAL meeting, at a time and place determined by the BOARD. PLANNING meeting location and time shall be published in the newsletter.

The BOARD shall be responsible for setting meeting dates and selection of facilities for all meetings.

Article 12: BENEFITS
Officers will receive their current years membership free and one bonus year after termination of their term of office. Directors will receive one bonus year for each complete year of service on the BOARD. Gifts to anyone, for any reason, shall never exceed $150 per person per year.

Article 13: BY-LAWS
The BY-LAWS shall be reviewed at least once each year prior to the end of the FISCAL YEAR to determine whether any amendments are in order. It shall be the responsibility of the BOARD, or its appointed representative(s) to review said by-laws and make appropiate recommendations. The by-laws may be amended by a 2/3 majority vote at any GENERAL MEETING, provided the recommendations and the vote date have been published in the newsletter. Roberts Rules of Order, Revised, shall be the accepted authority on all points not covered by these by-laws.



The REPEATERRRR

A hardware review by Chris Otis

****

A quick look....

Adds automatic repeating for any key on an Apple][or Apple][+ that uses separate encoder PC board mounted below the regular keyboard. This includes some revision 6 machines (like mine) and all revision 7 machines. Turns the normal repeat key into a super fast repeat. Has adjustable startup delay before repeating begins to avoid mistakes.

Compatible with all software and with 80 column boards and Z80 cards. Known to be compatable with the Videx keyboard enhancer for revision 6 or older Apples and with early Videx keyboard enhancers for revision 7 Apples. Users of Apple //e's or the deluxe version of the Videx keyboard enhancer won't need it.

Suggested list price $37.95 plus $2 delivery for mail orders. Thirty day full refund trial period and one year warranty.

SEE THE SPECIAL REPEATERRRR+ OFFER FOR CLUB MEMBERS ELSEWHERE IN THIS ISSUE.

High Order Micro Electronics Corp.
17 River Street
Chargrin Falls, Ohio 44022
(216) 247-3110

****

The REPEATERRRR is a nifty (and inexpensive) little add on for Apple][and Apple][+ owners. I can honestly say that I can't imagine why I didn't add one of these little gadgets to my Apple a long time ago. (Heck, I've added almost everything else).

What the REPEATERRRR does is add automatic repeating to any key on the keyboard without the need to hold down the repeat key at the same time. In order to repeat a key (including the arrow keys, return, or space bar) just hold down the key for a little while. After a short delay the key will start repeating. The delay time before the start of the repeating is necessary to avoid typing mistakes and this delay is typical of other computers and computer terminals. What is especially nice is that the delay time can be adjusted to suit your taste and typing habits.

Installation of the REPEATERRRR is fairly easy and shouldn't be a problem for any Apple owner. Simply separate the encoder p.c. board from the main key p.c. board, insert the REPEATERR over the pins, and slide the encoder back into its original position. The only thing to watch out for is that it will be difficult to re-insert the pins from the encoder board into the holes on the keyboard if they get a little out of line. If you can keep them straight you shouldn't have any trouble. At last I've got an add on that doesn't require the removal of any I.C's or the cutting of any wires.

Owners of the Videx keyboard enhancer for revision 6 Apples will have to remove the Apple case in order to have enough room to separate the encoder p.c. from the main keyboard. No sweat.

I have had the REPEATERRRr in my Apple for just a couple of days, but I have already gotten so used to it (it works just like the big machine at the office) that I really don't understand why I didn't get one of these before. The REPEATERRRR+ is a package deal that includes the REPEATERRRR for Apple][and][+ machines and another one chip add on so that the shift key asserts the Paddle 2 input of the game I/O port. Some (darn little actually) software will recognize this input to shift between upper and lower case or at least will allow itself to be configured for such a modification. So far the only notable software that I have come across that will recognize this modification is APPLEWRITER II. Installation of the shift key mod is a matter of removing the 74LS251 located in front of the game I/O connector and replacing it with the one supplied. The replacement is the same chip with a wire soldered to pin 1, the other end of which

is connected to the REPEATERRRRR. I am writing this particular review while using Applewriter II with the shift key mod installed and with the Videx lower case adapter and I used the Videx pre-boot disk to enable the 80 column card and the REPEATERRRR is in place, and I am frankly suprised that it works at all. Although the REPEATERRRR and the shift key mod work as advertised, there is a severe problem with Applewriter II and my Videx 80 column board with regards to response time of the screen. Fortunately there is a type ahead buffer (in the a.w. software) helping out.

Documentation for the REPEATERRRR and the shift key mod is good and includes some very nice drawings to show how to make the installation. Schematics are not included.

P.S. I did digress a little when I started to talk about my wordprocessers... Look for a review of some new wordprocessors (and some old ones) that do work well with this computer of mine in the next issue.

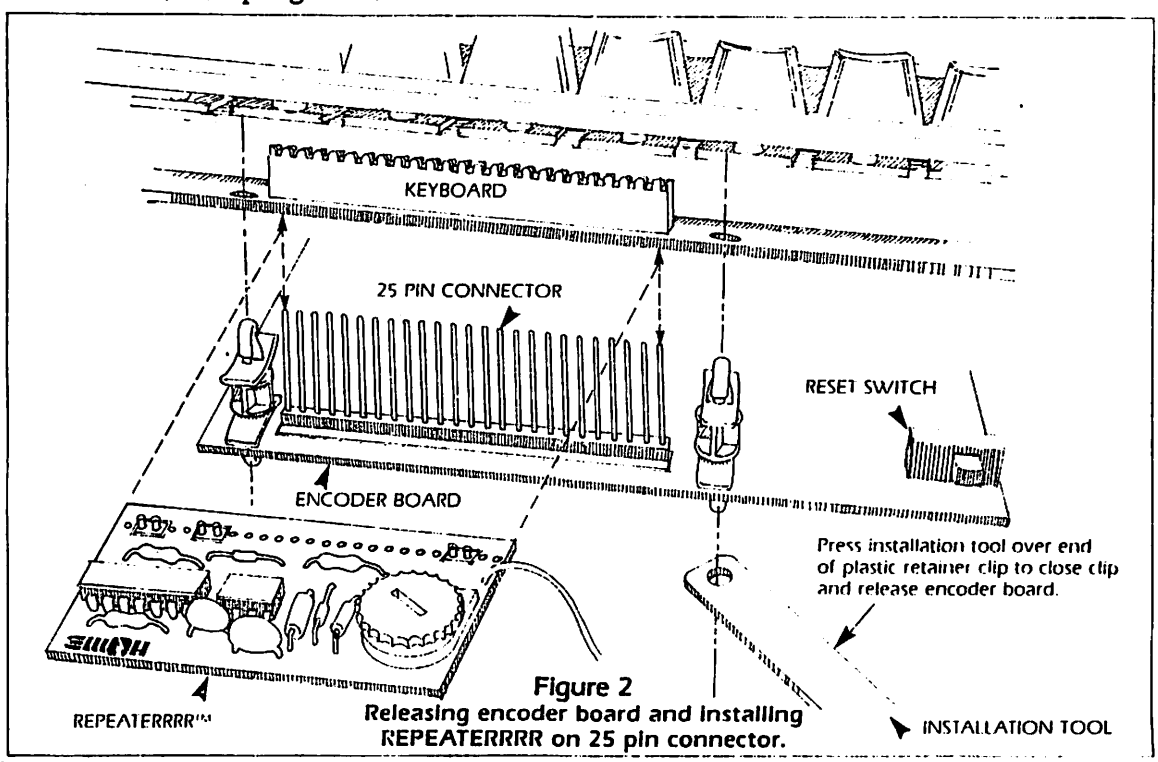


Figure 2
Releasing encoder board and installing REPEATERRRR on 25 pin connector.

SPECIAL ANNOUNCEMENT !!!!!!

From Chris Otis, Hardware Junkie

Attention Apple][and][+ owners. If you are like me and love your Apple, but wish that the keyboard would do just a little more, here is an offer you may not want to pass up. The REPEATERRRR is an add in board that attaches between the keyboard printed circuit board and the keyboard encoder board on later revision 6 and all revision 7 type Apples. If you have a separate keyboard encoder printed circuit board directly beneath the main keyboard printed circuit you can add the REPEATERRRR. The club is being offered this nifty little addition for a club price of $24, which is a 40% savings off of the regular price of $39.95. The only catch is that we must have at least 10 orders to take advantage of the club discount price. If you are interested in the REPEATERRRR+ (which includes the shift key modification) send me a check payable to NORTHERN ILLINOIS APPLE USERS GROUP for $24. The order will be placed no later than June 30th. If in the event that we do not receive at least 10 orders by July 30th, your check will be returned to you un-cashed.

Northern Illinois Apple Users Group
c/o Chris Otis
1948 Holbrook Lane
Hoffman Estates, Illinois 60195

The Dynax DX-15 Printer
Or
The Brother HR-15 Printer
Or
Letter Quality on the Cheap
by Al Guthrie

Not long ago, if you wanted a true letter quality printer, you either paid dearly or you forced a typewriter to do things it was never designed to do. But now a number of manufacturers are producing daisywheel printers that are price competitive with dot matrix printers. Of course, there is a catch; you can expect a daisy wheel at the low end of the price range to print about 10 Characters per second (CPS), equivalent to a typing speed of 100 words per minute. If this snails pace makes you nervous, learn to love dot matrix or prepare to spend more money. As for me, price has calmed my impatience.

From among the competing models, I chose the Dynax DX-15 manufactured by the Brother typewriter people and also sold as the Brother HR-15. It lists for $595, but it has been on sale for as low as $495.

Perhaps the first thing to note is that this is not a reworked typewriter. It is solidly built, with no tinny rattles and with a minimum of moving parts. Printing is bidirectional and logic seeking. That is, at the end of a line the print head will decide whether it is quicker to print backwards or to return to the left. It has a 2K internal buffer (3K optional) and can print multiple copies of the buffer contents.

The daisy wheel is a 96 character drop-in cassette that provides clean, crisp uniform print with no line registration problems. The characters are approximately elite size, but the printer will space them for 10, 12 or 15 characters per inch, and will accomodate proportional spacing. The 15 cpi setting gives a very crowded appearance if used for text, but is quite satisfactory for numeric data and tables. There are sixteen different type styles available, including English, ASCII and most foreign languages.

A Centronics parallel interface is standard, but I chose the optional RS-232C version, mainly because I already had a California Computer Systems 7710 serial interface. If you choose to use a serial interface be sure you can properly handle the Data Terminal Ready (DTR) signal on line 20. If you cannot, you can get by using the Request To Send (RTS) signal on line 4 by interchanging lines 20 and 4 on your cable. If you have a serial card that pays no attention to either the DTR or the RTS signal, you are in trouble, and through no fault of the printer.

Optional equipment includes a detached keyboard, a tractor feed and a cut-sheet feeder. The tractor feed has worked flawlessly for me, so far. I have not worked with the keyboard or the cut-sheet feeder

Two DIP switches on the back of the printer allow setting the page length, auto line feed (more about that later) and auto perforation skip. If you have the serial version you can also set the baud rate (up to 9600 BPS), 7 or 8 bit data length and odd or even parity.

The printer recognizes forty escape codes to control such things as resetting the dip switches by program, setting margins and tabs, underlining, double strike printing, etc.

The documentation consists of a 46 page booklet which provides all the information necessary in a clear but concise style, perhaps too concise for the novice. Printers are designed to work with many personal computers and many software packages. Computers, interface boards and software packages, on the other hand, follow no standard in dealing with printers. Trying to document the many unique problems that can arise as a result is difficult, and few printers attempt it.

As one example of the sort of problem glossed over in the documentation, consider line spacing. The printer normally supplies a line feed at the end of every line and a line feed after every carriage return. The line feed after the carriage return can be turned off by DIP switch setting, but the line feed at the end of a line can only be turned off by escape code, a fact that is not at all clear in the documentation. My serial interface supplies a

line feed at the end of each line which can be turned off by POKEing the appropriate RAM location. Any given software package may or may not supply a linefeed at the end of a line or after a return and may or may not allow you to send the appropriate escape code sequence and may or may not deal with, or recognize the serial board's linefeed. As a result, until you figure out the proper way to control line spacing with a given software package you may find your printing is triple spaced, or not spaced at all. In the absence of an industry standard, have patience.

The printer has an audible alarm to let you know when something is wrong, such as being out of paper or ribbon. This siren shriek is designed to torment you into taking action. Unfortunately, until you correct the condition that set off the alarm, there is no way to shut it off except by turning off the power, which would cause you to lose the material in the print buffer. By the time you've located more paper, threaded it through the platen and aligned it with the tractor pins, you may be ready to take a hammer to the printer, just to get some peace.

Aside from the alarm, the sound level of the the printer is no greater than that of a typewriter. However, I must admit that the inhuman regularity of computer-driven typing can be more annoying than the sound of hunt-and-peck.

In summary, if you must have print quality that is indistinguishable from typing, and can settle for the speed of a fast typist instead of a printing press, the Brother HR-15 or Dynax DX-15 is well worth consideration.

Paper Library

by Larry Erdmann

One of the most asked questions I receive is 'What is the paper library?' I will try to take you on a little trip into this strange land.

The NIAUG paper library is a collection of newsletters, from NIAUG and other clubs from all over the United States, handouts from past NIAUG meetings, books about the APPLE, and articles that we have acquired over the years. The key to the land of the paper library at present resides on NIAUG Disk #37. From the Disk you can gather up the key, the Ref#, this is the only way the items can be found at present. This is because each item is in its own brown wrapper, called a bag, protecting that elusive item.

Presently there are 35 different clubs including ours that have newsletters in the library. The reference number for the newsletter category carrys the prefix 'N'. Newsletters can give a broad source information on an even broader scope of topics than can be covered in our newsletter, the HARVEST. Some convey only club information while others are a wealth of knowledge about Apple computers and programming.

Following is a list current of newsletters that can be found in the library. Regretfully we don't have continuous issues of all the newsletters listed, but we are working to add to the newsletter section.

N0001-N0033	HARVEST	BUFFALO GROVE, IL	AUG. 79 - APR. 82
N0100-N0109	RAINBOW	AUDUBON, PA	JAN. 79 - NOV. 79
N0200-N0209	SOUTHEAST SOFTWARE	NEW ORLEANS, LA	SEP. 78 - SEP. 79
N0310-N0313	APPLE SHOPPE	PLACENTIA, CA	V1 #3 - V1 #6
N0420-N0440	CALL APPLE	SEATTLE, WA	JUN. 79 - SEP. 80
N0500	APPLE ORCHARD	DALY CITY, CA	MAR. 80
N0600-N0601	PROGRAMMERS SOFTWARE EXCHANGE	CABOT, AK	SPRING 80 - WINTER 80
N0700-N0708	APPLE GRAM	DALLAS, TX	AUG. 79 - NOV. 80
N0800-N0820	ABACUS	CASTRO VALLEY, CA	JUL. 79 - APR. 81
N0900-N0922	SEED	DENVER, CO	JUN. 79 - AUG. 81
N1000-N1007	STEMS	BEAVERTON, OR	JAN. 80 - NOV. 80
N1100-N1102	KEYSTONE	MECHANICBURG, PA	AUG. 79 - JAN. 82

N1200-N1210	APPLE PEEL	BIRMINGHAM, AB	DEC. 79 - APR. 81
N1300-N1313	MINIAPPLES	BURNSVILLE, MN	APR. 80 - MAY 81
N1400-N1411	CAROLINA APPLE CORE	RALEIGH, NC	JUN. 79 - MAY 81
N1500-N1511	MICHIGAN APPLE GRAM	MADISON HTS., MI	APR. 80 - AUG. 80
N1600-N1601	EDUCATORS	VENTURA, CA	JUL. 79
N1700-N1709	I/O PORT	TULSA, OK	MAY 80 - APR. 81
N1800-N1805	APPLE BARREL	HOUSTON, TX	JAN. 80 - MAY 81
N1900-N1906	POKE APPLE	CINCINNATI, OH	MAY 80 - AUG. 82
N2000-N2010	APPLE DILLO	AUSTIN, TX	SEP. 80 - JAN. 82
N2100-N2104	CIDER PRESS	SAN FRANCISCO, CA	SEP. 79 - DEC. 80
N2200-N2201	ACES	CORAL SPRINGS, FA	JUL. 80 - AUG. 82
N2300-N2306	LAUGHS	LOUSIVILLE, KY	JUL. 80 - MAR. 81
N2400-N2401	SOUTH BAY	TORRANCE, CA	JAN. 81 - APR. 81
N2500-N2503	SCAN	SARASOTA, FL	FEB. 81 - MAY 81
N2600-N2602	JACKS	PASADENA, CA	OCT. 81 - NOV. 81
N2700-N2703	WAPPLE	WILLWTTON, WA	JUL. 80 - FEB. 81
N2800-N2811	FWAUG	FORT WORTH, TX	JUL. 79 - APR. 81
N2900	AIDE	AMARILLO, TX	AUG. 81
N3000-N3001	GRAPEVINE	NEWARK, DE	FEB. 82 - MAR. 82
N3100-N3101	SNAC	DERRY, NH	JAN. 82 - FEB. 82
N3200	EVAC	COVINA, CA	NOV. 80
N3300	APPLE PI	BETHESDA, MD	AUG. 82
N3400-N3401	APPLE PICKER		JAN. 81 - JUL. 82
N3500	NCSU AUG		JUL. 82

The handout section of the library is exactly what the name implies, handout from past NIAUG meetings.

In the book section we have;

APPLESOFT BASIC PROGRAMMING REFERENCE MANUAL
DOS VERSION 3.2 DISK OPERATING SYSTEM INSTRUCTIONAL AND REFERENCE MANUL
APPLE PARALLEL PRINTER INTERFACE CARD INSTALLATION AND OPERATING MANUAL
APPLE II BASIC PROGRAMMING MANUAL
APPLE SERIAL INTERFACE CARD INSTALLATION AND OPERATING MANUAL
APPLE AUTOSTART ROM INSTALLATION AND OPERATING MANUAL
THE APPLESOFT TUTORIAL
APPLE II REFERENCE MANUAL JANUARY 1978, the RED book
FCC REGULATIONS ON RADIO FREQUECY INTERFERENCE
BEST OF CIDER PRESS 78-79
BEST OF CIDER PRESS 80

The last section of the library is the Article section. This is a reference section and catch-all part of the library. Some of the notables you might see here are the famous WOZ pack, Apple AP notes, IAC Tech notes, some magazines and some article that have been removed from magazines.

So as you can see the paper library contains knowledge, but that's what a library is.

To check out material from the paper library you must have the Ref# and be willing to return the material in one month. Again I must say you will need the keys to open its doors and they are found on NIAUG disk #37. See you there, its a great place to visit.

If you have some material that you might want to donate to the Library contact me and I can see if we can make room for it. Or if want to take a more active part in the library function of the club come to a Library SIG meeting by contacting Joe Zeinz.

APPLE IIc DESCRIPTION

In the new Softalk Magazine issue (May 84), some Apple //c specs are explained (although not into incredible depth and I would just like to round up some of the points that Margot Comstock Tommervik wrote about in her copyrighted article.

1. When I said earlier that the Apple service rep that I knew said that the 'c' in the name Apple //c meant 65C02 and not 'compact', that was his opinion, not mine. And since he works repairing them anyway, I mearly reported it to the net, although I belive that 'c' means 'compact' also. It seems that he was wrong as most publications (including Softalk) are saying that 'c' means 'compact' so I guess he was wrong. Sorry Ron.

2. Basic Specs. The Apple //c is a full Apple//e smashed into a size of about 11" x 12" x 2". It contains 128K, double-hires capability, eighty-columns, a full //e confiquration keyboard (although the keys are smaller and not full- stroke, but managable and much better than the PCjr) and upper and lower case standard (even accepted by Applesoft!!). It weighs about seven pounds which is about a third of the weight of the PCjr and has a built in handle for transportability. The rumor around Appleland is that whoever was in charge to design the //c went into Sears and found the smallest briefcase that he could find and proceeded to build the //c to fit inside of it.

3. I/O. Being as small as it is, the //c obviosly dooesn't have any slots, but it does have 2 serial ports (RS-232), an extended video port for RF-modulator, RGB or liquid crystal display, a composite video port for regular monitors, an external disk drive port, and a mouse/joystick port. Earlier, it was posted to this bboard that the old Disk][drives could not fit the new port for the //c and they wondered if a second drive has been developed. Well, there is a second drive and it is a half-height design that looks very nice beside the //c as they have both the same basic external design. Just above the keyboard are a couple of thin, apparently heat-sensitive buttons which are a 80/40 column switch (pokes to the old soft-switches and PR#3 still work but this switch is for the user's sake) and a button marked "keyboard" which toggles the normal QWERTY set and the DVORAK standard. There are two lights on the right side above the keyboard, also thin which are for power and disk-in-use. The Reset Key has been moved to the left of the 80/40 column key in a slanted box shape. Presumably, it takes the same combination of Control-Reset to actually reset the machine. Although the alticle does not specify, I suspect that the two serial ports are logically in slots 1 and 2 as mosts if not all Apple users have their printer cards in slot 1 and their modem cards in slot 2. The mouse uses slot 4, just like the IIe. The disk drive controller is always in slot 6. I suspect that most users will not miss the absent slots as there will be two serial ports to use and the mouse option is there also, which means less cards to buy (another cost consideration and card compatibility lessens as a factor as software companies begin writing software to take full advantage of the //c (the serial ports shouldn't really have compatibilty problems anyway). The built-in disk drive is not a Sony 3.5 inch design like some people think (That would be a huge software compatability problem), but instead is a standard 5.25 inch half-height which fits in snugly into the design and has its opening on the right side of the machine.

4. Other ramblings. The //c does not have an internal AC power supply but instead an external AC to DC one that weighs 1lb. and is about the size of a small brick. Not having an internal AC power supply makes the possibility of using the //c with a battery pack much more feasible and it (the power supply) costs about fourty bucks. No word on when a battery pack will be made or if it will be even made by Apple. The flat LCD screen that has been promised for September delivery weighs less than a pound and the carrying case that Apple sells for the //c already has a pocket for the monitor. It is standard LCD black and white flat screen and supports 80 x 40 columns for text and 560 x 192 for double-hires graphics. It will work for everything although fast hires graphics will leave trails on screen. The only thing the article doesn't mention specifically is price although I've heard that it is somewhere in the $1200-1300 range ($1295?). That may make a $300 dollar C64 seem very inviting but when one adds its $300 disk drive and one takes into account the memory difference (which Commodore has been bombarding us with in its ad campaigns for some time about other machines--128K v. 64K), then the price doesn't seem too bad at all (although it could be a little less). Also, the disk drive PROM has been slightly changed so that if there is no disk in the drive upon boot or the drive door isn't closed, instead of spinning blinding into eternity, a message appears on the screen, "Check disk drive". The ProDOS operating system is standard.

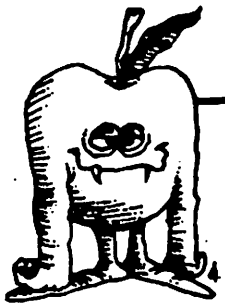
5. For Apple purists. Apple is changing the way they make their machines. The color of the //c is NOT the traditional beige found on all their previous models but instead is our off-white oyster color with a beige keyboard. Also, the old keys with white plain lettering on][s,][+s, and early //e's is gone, replaced by thin black italicized lettering. This is a change for the better from the new //e keyboard lettering which looks borrowed from the IBM PC (small black lettering in the key's upper left hand corner). However, I still like the old][+ keystyle. Oh well, progress I guess.

That about rounds it up. It still runs about ninety percent of the old][+ family software and just about all of the //e's software (that isn't protected by ROM checks, as there have been slight changes to a few rountines. Time will tell on how soon it blows the PCjr out of the market, but from indications of the PCjr's sales, it just might be doing that to itself already. Word is from the big blue that the PCjr will soon receive some improvements to memory (512K), a new keyboard, and other enhancements so I guess we can't count IBM out yet.

The latest issue of "A+" describes the Apple //c. Some additional points:

- The power supply input is 12V with a wide tolerance, making the automotive electrical system a good power source.
- The 80/40 col soft switches etc. are supposed to be improved over the //e, although there are indications that the same custom logic (MMU & I/O control) chips are used. I have to admit that the //e is tricky to use in 80-column mode.

I have actually played with a //c for a while and the keyboard is satisfactory.



northern illinois apple users group

4th
N.I.A.U.G. ~~3rd~~ ANNUAL PROGRAM CONTEST
PROGRAM ENTRY FORM

==========

DATE _____

NAME _____

ADDRESS _____

CITY _____

STATE _____ ZIP _____

==========

PROGRAM NAME _____

PROGRAM CATEGORY _____

FILES NEEDED IN ADDITION TO NAMED PROGRAM _____

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BRIEF DESCRIPTION OF PROGRAM _____

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The program submitted herein is my own original work and is being donated to the Northern Illinois Apple Users Group. Permission is granted to the N.I.A.U.G to distribute this program in accordance with its constitution and bylaws.

SIGNATURE OF SUBMITTER _____

DATE _____

MAC NOTES

The folowing messages were taken off a national network for Unix Systems by George Wilkin. The section of the network where this information was found is dedicated to problems and solutions relating to the Macintosh. They give some insight into the evolution of the Macintosh (shades of the Apple II) and you will see a picture of Jerry Pournelle (Science Fiction Writer and Byte Magazine columnist) in an informal situation. We hope you find them interesting.

MAC RESALES

A while back there was some talk about the problem of restricting Mac resales. It was suggested that only a leasing arrangement would legally inhibit resale of college-bought Macs.

Well, Harvard is now releasing Macs by a system of one-year leases (the price is ~$1200), after which period the machine does indeed become the full property of the lessee.

Subject: A bushel of Apples

I just heard from a reliable source (whose name was actually Lisa), that a certain eastern university had trouble locating a shipment of Macintoshes. It seems that when the delivery truck arrived at their Computer Center and said they were delivering Apples, they were sent to Food Service. Food Service reportedly accepted the shipment of untold boxes (bushels). :->

Subject: Macintosh books at the 9th West Coast Computer Faire
Source-Info: From (or Sender) name not authenticated.

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books on Macintosh at the Ninth West Coast Computer Faire

One indication of the success potential of a product is the number of authors who think they can make a buck writing a book about that product. There were at least four books on Macintosh already on sale (with announcements of more to come) at the Ninth West Coast Computer Faire. Although most of the books seem to be "quickies" that merely reiterate the standard documentation that comes with a Macintosh, some seem actually worth buying.

Microsoft Press (distributed by Simon and Schuster)			
"The Apple Macintosh Book"			<for sale>
Cary Lu	$18.95	320pp.	
"Presentation Graphics on the Apple Macintosh"			<announced>
Steve Lambert	$18.95	256pp.	<May84>
"Macwork/Macplay"			<announced>
Lon Poole	$18.95	352pp.	<Aug84>
<book on Microsoft Basic for the Apple Macintosh>			<rumor>
Mitchell Waite			
<another book on basic>			<rumor>
Mitchell Waite			
<book on Microsoft Word for the Apple Macintosh>			<rumor>
Mitchell Waite			
<book on Microsoft Multiplan for the Apple Macintosh>			<rumor>
Mitchell Waite			
Softalk Books			
"Macintosh! Complete"			<for sale>
Doug Clapp	$19.95	~240pp.	

Hayden Books

"Macintosh Revealed"			<announced>
"Macintosh Instant Pascal"			<announced>
"Macbasic Tutor - Volume One"			<announced>
"Macbasic Tutor - Volume Two"			<announced>
"Macbasic Programmer's Reference"			<announced>

Reston Computer Group (a Prentice-Hall Company)

"Understanding the Macintosh Computer"			<announced>
Rick Dayton			

Sams Books

"Introducing the Apple Macintosh"		#22361	<for sale>
Connolly/Lieberman	$12.95	~120pp.	
"Insight to the Apple Macintosh"		#22319	<announced>
??	$12.95	288pp.	

Dilithium Press

"Presenting the Macintosh"			<for sale>
Miller/Myers	$5.95	116pp.	

>From: Jerry E. Pournelle <POURNE @ MIT-MC>
Subject: Macintosh books at the 9th West Coast Computer Faire

We are informed that the Cary Lu Mac Book was heavily subsidized by people with big financial stake in high Mac sales, so that one, at least, can hardly be counted as independent evidence of future Macsales. There were big Maccrowds around the Macintosh, though, and we are Mactold that the Macintosh is out macselling the PCjr.

At Faire I saw almost no macsoftware. There was macforth, and bruce tonkin had a nice program demonstrated at the Workman booth, but outside ot macplan (which has a ghastly form of maccopy macprotection) I saw maclittle outside software. Did I macmiss macsomething?

>From: Jerry E. Pournelle <POURNE @ MIT-MC>
Subject: Mac 100 day offer?

If they macraise that price any more, by charging for their macsoftware for a mac chine that doesn't do very much anyway, they'll probably be in mactrouble. I understand the Wall Street journal is preparing a macevaluation that is not macfavorable for it as a macbusiness machine. Of course that's correct; it takes about 40 disk swaps to make a backup, and no business can operate without safety copies.. Even the macforth people had no second drive (well they had one, but it was a kludge without case.)

Subject: Re: Disk naming + copying

The Finder now has a 50K buffer, worst case, which means that a 400K disk should be copyable in 8 swaps (16 insertions), + a swap to get back the boot disk.

There will also be a single-drive-copy utility which will use a 100K buffer (including the screen) which allows a disk copy in 4 swaps (8 insertions). For copying a small number of files, the Finder will be better, however. For example, copying four 10K files can be done in as little as one disk insertion.

JEP's note about Mac not being a good business machine will be obsoleted by the external disk drive. Since I'm at Apple, I've had a Mac and an external drive for quite a while now, and backing up is trivial. Why all the negative stuff, JEP? Still living in the S100 world? Please go and try one--I think you'll be pleasantly surprised, if you approach it with an open mind.

Subject: Re: Jerry E. Pournelle

I usually try to avoid public ad hominem remarks, but does everybody else find JEP as obnoxious as I do? Honestly, Jerry, we heard all the Mac prefix jokes we're likely to need already. Please try and use the real English language from here on out. Just because advertising people don't use it is no excuse for us not to.

Subject: Macintosh stuff at the 9th West Coast Computer Faire
Source-Info: From (or Sender) name not authenticated.

Macintosh stuff at the Ninth West Coast Computer Faire

In addition to books on Macintosh for sale at the Ninth West Coast Computer Faire, several other Macintosh and Lisa related products were on display. It seems reasonable to assume that many Lisa related products will be converted to work with Macintosh.

Hardware

Tecmar demonstrated both a ten Mbyte fixed winchester disk system and a dual five Mbyte removable winchester disk system (the obvious fixed/removable combination is also in development). Each system was connected to Macintosh via one of the serial ports. Both are expected to be available by fall and cost slightly over $2K. They announced print buffer and an HPIB-to-AppleBus converter products, but no firm information.

Several Apple Macintosh external disk drive preproduction prototype drives were seen, but none were for being sold.

Several manufacturers (Apple, TNW, Hayes, etc.) demonstrated 300 and/or 1200 baud modem products with MacTerminal.

The Artsci demonstrated their MacPhone product (touchtone, two phone lines, auto dialing, hold button, rate timer, etc.). They said it was completed and awaiting FCC approval.

Software

Several retail/wholesalers were selling Microsoft's MacBasic and Macintosh Multiplan. Several developers demonstrated programs using Instant Pascal (looks fairly fast although the windows may actually make it harder to use). MacProject (very impressive) and MacTerminal were show by various vendors.

Creative Solutions was selling MacForth (level one for $149 and level two for $249). It looks good as a product, but the cost of right-to-execute license may limit potential markets.

A version of Creator/Reporter for the Macintosh was demonstrated at the Workman & Associates booth. Creator is a public domain data base program generator for Microsoft Basic while Reporter is a report program generator.

Penguin Software demonstrated a version of Transylvannia for the Macintosh (Apr84 $34.95). They announced that Graphics Magician Picture Painter, The Quest, and The Coveted Mirror would be released by summer.

Sir-Tech demonstrated a version of Wizardry for the Macintosh (available soon) and mentioned that several other games which they may convert.

> Parenthetically, most of the interesting animation affects on the Apple II were accomplished via page-flipping between the high resolution screens. Is there any way to change the start of the displayed memory in Macintosh? Is this technique necessary in Macintosh for animation effects?

Artsci mentioned that they will probably convert their Magic Office System to run on Macintosh.

Videx demonstrated their Desktop Calendar (notebook, appointment book, alert, tickle file, calendar, etc.) for the Lisa 2 Office System. One of their people indicated a Macintosh version was in development.

Subject: Re: Jerry E. Pournelle

The thing about Pournelle, whose remarks in general, it seems to me, sometimes reflect lack of information (it's called being both positive and wrong), is that on the Mac he has, it seems to me, turned nasty. It is my opinion that many of his remarks seem to reflect a lot of anger. Why he should be angry, and at whom isn't clear. As long as he confines it to this bulletin board, each of us can filter what he says through our own opinions. When he starts to put some of the content in his column, he can be damaging. I believe there's something going on; I live near him and offered to let him look at my copy of 'Inside Macintosh' and answer any technical questions(I am an Apple registered developer), giving him my phone number and offering to make myself available at his convenience. He never took me up on the offer, and is still spouting what I see as emotional anti-mac stuff. I dunno, Marty, what do you want to do tonight? --david--

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>From: Jerry E. Pournelle <POURNE @ MIT-MC>
Subject: Jerry E. Pournelle

ye flinking gods.
LOVE ME, I am APPLE, and you MUST LOVE ME! Anything less than total devotion shall be punished.

Tell me, MacSir: if I am a business man and I put together a large and important financial model, how shall I save it? How back it up? How many swaps? And if I wish to DO SOMETHING USEFUL, with what do I macDo It?

I am getting damned tired of the MacHype, and especially the kind of crap represented by your comments about my "emotionalism". Anything less than total devotion to the Mac is, I gather, punishable. One does not question the Good Guys.

Well, we have bought a Mac for 3000 bucks, and the

documents that explain the error codes and such like for another 150; which is why I had no need to take you up on your macoffer, and besides, I didn't need another dose of machype about how macwonderful it is.

I have yet to get a logical answer to the question of what the computer for the rest of us can DO just now. True: if they can sell enough of them, then the software may appear (assuming the deliberate limits to the machine such as the soldered in 128 k of memory and the single drive and the keyboard with no escape key and no arrow keys and the non-available numeric keypad (not available at our store anyway, and unimportant; I presume it will come) -- assuming the inherent limits don't stop the software, then if they sell enough of htem it will get written.

A neat job. Like a Hollywood movie. Go to the star and say you have the script; to the director and say you have a star; to the writer and say you have a director; to the money people and say you have star, script, and director; and with luck you will have made it all retroactively true. If you do not bring it off, well...

So Apple treats its customers as venture capitalists, and that's all right; but then they will not listen to any suggestions (you cannot imagine how many PLEADED with them to add another drive, or at least have the extra drive avaialable when it came out) and to keep the price at something reasonable is not within their intent.

Are those facts? Then if it were not an apple product -- if it were IBM -- would you condemn anyone for wondering what all the shouting is about?

Ye immortal gods. Do you wash your own brains, or do you take them to a laundry?

>From: Jerry E. Pournelle <POURNE @ MIT-MC>
Subject: Macintosh stuff at the 9th West Coast Computer Faire

1> the Development Team Seminar was useless. More information has been in BYTE than Apple gave at the seminar.

2> Bruce Tonkin wrote the Creator program in his P-basic (which is a preprocessor to microsoft basic). It was about the only application software for Mac I saw other than the two microsoft (multi plan and basic) products.

I had not known Bruce put Creator in public domain. I believe my copy carries a copyright notice. It's not here just now so I can't check.

3> there is a problem with using the data base: namely that saves are slow and backup copies are slow to make. But it does work, and it's fairly impressive.

Subject: Re: Jerry E. Pournelle
In-reply-to: Your message of 27 Mar 84 11:34:02 PST (Tuesday).

I wish people would follow the editor's advice and keep ``Is the MacIntosh a useful/bogus machine'' discussions off of INFO-MAC. They are a bit like the anti-UNIX flames that occasionally erupt in UNIX-WIZARDS, and generates no more useful information.

As for Jerry Pournelle, I would hope that someone who has been around as long as he has would have a bit more respect for the purpose of this list: information, not innuendo. The jury is still out as to what kind of technological advance the Mac represents (if any). Right now, those of us with Macs and those of us preparing for Macs want hard data, to see just what we can get this beastie to do. Six months from now we'll all know just how successful our efforts have been.

If you want to argue the relative merits of the MacIntosh as compared to the IBM-PC or the IMSAI 8800, do it in INFO-MICRO where such discussions are more appropriate. Or even better, bite your tongue for a while until the dust clears.

>From: Jerry E. Pournelle <POURNE @ MIT-MC>
Subject: Disk naming + copying

When (Real Soon Now) you can GET the external drive (and how much will that cost?) I will be glad to act as if Apple is selling a two-drive systm. At the moment, for completely unfathomable resons--certainly no one has ever given me a logical explanation other than that by saving some money Apple can pass the savings along to their stockholders, just like IBM does-- the Macintosh is a single drive system.

When the software is out, and the second drive is out, and the extra memory is installed, you are probably talking about a $4000 package. It may be that for that price there is no competitive system, but I thnk I do not _a priori_ accept that.

If the systems documents came with it, one might be able to decide what you could REALLY do with the Mac; but in fact the "development seminar" at the Faire was a , well, I won't say joke, but the kindest words I heard were "waste of my time" (this from a Mac enthusiast). Thus: I don't know what you can do with a Mac other than buy a Lisa-2 to keep it company. Lord knows this is a clever deal for Apple; Lisa sales were not very good, so perhaps the Mac can do something to remedy the situation.

None of this is reprehensible. However, I see no reason to pretend that Apple has joined the ranks of the public benefactors, or that we should view this marketing strategy any differently from the way we would view it if IBM or DEC had adopted it.

If IBM had come out with a proprietary operating system, every editor in this field would be screaming at them.

The MacIntosh divides the micro community; there is not even a way to get source code onto it (except through a Lisa). The documents that come with it do not explain the error messages you can get by what seem reasonable operations. Thgere are several ways inadvertantly to lose text or pictures (we lost the pretty picture of the fish when I cut instead of pasted).

I can do four to six page illustrated memos with a Mac. Or with a Flair.

The worst is that there exists a terrific operating system, more or less derived from the dame place that Apple got the ideas for Lisa and Mac. It's the PUBLIC DOMAIN Modula-2 operating system that uses mouse, has integral debugger and real time windows, and does provide a programmer's dream working environment; not only does Macintosh not seem to have made any attempt to interface with that, but I have some evidence that there's not enough information given to allow that to be done.

I want to see the MAC dragged, kicking and screaaming if need be, into the micro world so that it can be source code compatible with text filters, formatters, index systems, editors, and other stuff; why must we always reinvent the wheel? But I see little chance of that.

And the name of that game is MacProfit.

When IBM brings out a proprietary operating system, and isolates their customers from the rest of the micro world. will Apple cheer? (Probably; it also gives Apple a safe niche?)

I know that every time we are divided, we give another rachet to IBM. Theeffect of the Mac may well be to do that

again. WHY COULDN"T IT HAVE MADE SOME PRIVISION FOR SOME COMMUNICATIONS WITH THE REST OF THE MICRO WORLD? WHY COULDN"T IT HAVE HAD A , if not standard, then at least not DELIBERATELY UNSTANDARD keyboard? And so forth. And why must I regard all these trends as if they were handed down from on high, so that it is the Sin Against the Holy Spirit to question them?

Subject: Re:Re: Periph. Actually..
ReSent-To: info-mac: ;

In the way of response to Randy Frank's message concerning "How can Davong use the RS-422 port for the hard disk?"... this is simplicity itself, since the Mac is made to be used with central devices on the A-Net. The RS-422 IS the connection to the A-Net (PLEASE, someone correct me if I am wrong, this is what Apple seemed to say when I spoke to them after an on-campus lecture). This means that any device capable of acting as a netted device on A-Net (I assume this is how the Davong unit does it) can be accessed over the net with the proper leading message requesting the hard disk. The real question is.. how fast is it? The RS-422 port has a maximum speed of 1Mbaud and that, combined with the net style data transmission should degrade the effective speed of the hard disk.

Subject: Tiring Mouse UI

Douglas Engelbart, inventor of the mouse, gave a talk at Xerox PARC a few days ago. He commented on having used LisaDraw, and how tired his right arm became while his left arm dangled uselessly at his side. Around the time the mouse was developed, there was also a "keyset" which had five keys for the left hand to chord. This would let you enter characters that would be treated as commands or text to enter. This is something he is used to.

This illustrated something I don't like about the Lisa and Macintosh user interfaces: they overload the mouse. Most operations are invoked using the mouse, rather than also using function keys. Though there are control keys to invoke some operations, they are hard to remember, are different for each application, and difficult to use since you must press the control key at the same time you press the letter. For instance, while in the Finder, control-I (which is a bit hard to type) does Get Info, while in MacWrite control-I does Italic. Notice also that control-P was not used for Paste since it's so awkward, but instead control-V, which is non-mnemonic.

It seems that Apple became mouse-happy and tried to make it do too much. This may have justified the lack of a row of virtual keys on the keyboard, or at least keys for commonly used commands, like Cut and Paste. They tried to move away from the keyboard rather than melding it with the mouse.

Although MS-Basic isn't PL/I or even Pascle I myself have no major complaints. The editing system makes I.B.M.'s version look like the obsolete code it is. But, in truth, I will most likely drop MS as soon as MacBasic comes out. For those of you who haven't read it's description in Byte I strongly recomend it.

A few Notes on Basic:

As previously noted "Clear,25000" gives the user more programming space, but only at the expense of the heap. Well, after using that command, I felt like I was programming in sludge. When I tried scrolling my list window EVERY SINGLE LINE had to be called off of the disk. I tried some fiddling around and found that around "Clear,20000" is the largest clear statement that will give you more memory, but not kill the systems speed. The system boots with a "Clear,14***" already in process, so you can acquire about another 5K with "Clear,20000"

Subject: Japanese Macintosh

The Japanese Macintosh indeed poses a set of problems different from the modifications required for European products. We want to find the best way to make Macintosh approachable, attractive and affordable to Japanese customers. Xerox J-Star, IBM 5550 and NEC PC-100 are some of the systems we have evaluated in our quest for solutions and models. The phonetic input method is indeed becoming a standard way to tackle the problem of Kanji. Better solutions (such as Xerox's J-Star) do grammatical pre-processing before conversion into Kanji, thus significantly simplifying the task of the typist. Meanwhile, Apple will put out a Kana Macintosh as a stopgap solution until the full blown Japanese (Kana/Kanji) system is ready. The majority (if not all) of the Japanese MANAGERS do not type and prefer to handwrite their notes: a keyboard is still associated with a typist or secretary. Simplifying the typing process will certainly help in making computers more appealing to managers. I hope this answers some of the questions raised by the Macworld article on International Macs.

Joanna K. Hoffman
International Marketing Manager

Subject: 1 vs. 2 floppy drives

When people point out the "flaws" in the design of the Macintosh, the one most frequently mentioned is the absence of a second built-in floppy disk drive. This seems to be a recurring theme in both computer journal articles and the `info-mac' mailing list. For example, here's a "typical" comment, quoted from the famous Macintosh review in the Feb. 84 issue of BYTE Magazine:

> I also feel strongly that the basic Macintosh package should include two disk drives. With a one-drive system, it will take at least eight disk swaps to back up a 3-1/2 inch disk. How many people (especially novices) will go to this trouble, and how many will suffer when they don't? (I am not alone in feeling this way; the first thing two BYTE editors said when they first saw the Macintosh was, "Only one disk drive? You've got to be kidding!" After numerous disk swaps when trying to load MacPaint from one disk and a drawing from another, I am convinced that most users will eventually buy the second drive.)

I am a little surprised that no one (even for the sake of playing devil's advocate) has expressed the opinion that the single-drive architecture is "a good idea" or even "OK".

In order to judge the wisdom (or lack thereof) behind the design decision, we need to consider the potential uses of the Macintosh. I have attempted to categorize the possible approaches according to disk configuration options. This list is not necessarily all-inclusive:

1) The "Spartan/Cheapskate" Approach: one built-in floppy drive (period). Suitable for students, hackers, or anyone else who doesn't place a high premium on the value of his/her time. The user does backups by multiple disk swaps (tedious but effective) or choses to not do backups at all. [There *are* applications where losing data and/or having to regenerate it is a minor inconvenience rather than a disaster, and the cost of doing the backup has to be weighed against the cost of loss multiplied by the probability of loss. Those of us used to storing large original documents (such as program sources or collected raw data) may forget that there are cases where the balance tips the other way.]

2) The "Expanded Memory" Approach: still only one built-in floppy drive, but with 512K bytes of main memory. Not an option yet, but we'll surely see it within a year. Apple plans to offer a board upgrade when the denser RAM chips become more economically feasible. Daring hackers could replace the chips themselves. With a half-meg of memory available, copying a 400K floppy could be done with a single swap! One could claim that having a disk with less capacity than memory represented a serious mismatch, although many applications could make good use of this configuration.

3) The "Standard" Approach: one built-in floppy, one external floppy. Only slighly less convenient than having both built in. Yes, it's obvious that it's going to cost a bit more because of the extra box, cable, and power supply (or does the external drive get its power from the Mac?). One could even argue (though I won't bother) that an external drive was *superior* to a second internal drive because the user is "less likely to get confused" about which disk is is which drive.

4) The "Professional" Approach: one built-in floppy, one external hard disk. The preferred configuration for many business applications. I understand that compatible hard disks are already available, and more are on the way. Certainly more cost-effective than floppy drives when judged on an on-line-bytes-per-buck basis, and the prices should continue to drop as these units become more popular.

5) The "Workstation" Approach: one built-in floppy, one serial line to a local or remote host mainframe. The Mac can be used as a (very) intelligent terminal, and can off-load many interactive tasks (such as document preparation and data entry/verification) from the host. The built-in floppy provides local/personal file storage, while the host provides mass storage.

6) The "Network" Approach: one built-in floppy, one serial line to a local area network. Similar to the "workstation" approach, but the Mac is not tied to any particular host -- in fact, the network need not have any "host" computers at all other than the Macs themselves. However, to eliminate the need for a second disk on each Mac, the network should include at least one file-server host, which provides access to large and/or shared data bases and space for back-up buffering.

Notice that option 2) is the only approach that *needs* the cherished second floppy drive. In all the other options, the elimination of the (unnecessary) second drive represents a savings to the consumer. I'm not saying that we're saving the *entire* cost of the second drive (I haven't forgotten that Apple is trying to make a profit as well as a sucessful product), but we're certainly saving some of it. And while the "Standard" approach is currently the most popular, it doesn't represent such an overwhelming percentage of the potential applications that it makes sense to include an expensive option in every base unit. If the argument seems weak now, wait a year -- I predict that the "Standard" approach will diminish in (relative) popularity as some of the other approaches become more economically feasible and their advantages become better understood.

As for me, I ordered my Mac without an extra drive. I'll start with the "Spartan/Cheapskate" approach (after all, since there's no software yet, anyone who buys a Mac *now* is in the hacker category anyway), see how painful it is, and when the need arises, chose an option for expanding (there will be more options to chose from then). I'm happy that I didn't have to start by buying into an approach that may not turn out to be best for me in the long run.

I chose to buy a Mac, but I was not so blinded by love that I didn't see

its faults and limitations. When I compared it to other personal computers, I counted pros & cons. The absence of a second floppy drive was not something that ended up in my "con" column. I think Apple got this one right.

From: Jerry E. Pournelle <POURNE @ MIT-MC>
Subject: deadlines

I have a column deadline first part of next week. Would appreciate information/comments on:

1. I have sources say that the reson you cannot get your Macdisk fixed if it dies (and many do) is that the replacement drives are being kludged by hackers to make second drives for their systems, and are being bought out the back doors of stores. May not be true, but I can certainly get goot source materials.

2. Is there ANY available applications software for Macintosh as of this date? (Not what will be out next week...)

3. A correspondent tells of buying a Mac which died within an hour. The store quoted a four week time to fix; Apple policy forbids supplying him with one from pipeline and swapping live for dead unit; calls to Apple produced sympathy from those taking call, but return call saying that was indeed policy. (Reader got refund and bought Kaypro.) Is this indeed Apple policy, and if so, why?

I have a Mac. It's much fun. I agree that many people who would never play with computers find it fascinating. Without software, languages, or assembler, it m ay be a bit costly for some of us.

Subject: Accurate Info for your column

Dear Jerry,

Here's some accurate information for next week's column.

1. The external 3 1/2 " drive for Macintosh will be available for sale at all dealers next week. The Sony drives are extremely reliable, and failure rates are very low.

2. Currently there are 9 applications out for Macintosh:
MacWrite, MacPaint from Apple;
MultiPlan and Basic from Microsoft;
MAGICPhone by Artsci;
ClickArt by T/Maker Graphics;
MacForth by Creative Solutions;
Transylvania by Penguin Software;
and MegaMerge by MegaHaus.

In May developers expect to ship ten applications (including Microsoft Chart), and in June there should be at least 35 additional applications (eg. Macintosh Pascal).

3. All Apple products are under 90 day warranty. All Dealers are required to stock spare parts for our computers. The Macintosh reliability rate has been extremely high. I'm surprised to hear that this particular person has had trouble with servicing his Macintosh. If he would call Apple (Donna Dubinsky, Manager of Distribution) in Cupertino I'm sure she would be more than happy to help solve the problem.

Hope you continue to enjoy your Macintosh.

Barbara Koalkin
Macintosh Product Marketing Manager

Subject: MacWrite "Feature"

Interesting little thing popped up while I was using MacWrite. I had a 5+ page document I had written to experiment with MacWrite. I added a header and a footer to the document, and printed it out. I went through each of the modes to check the differences. Draft mode is nice and fast, except for one minor problem.. With the header option on, the Mac writes them as seperate files. This is natural since it's 3 different windows and not just a "snapshot" of the file as in other modes. The Mac will meriily whip off a page, print the footer (in this case a page number and string of text) do a "formsuck", print any header text at the top of the page it just printed, line feed, think a moment, go back and print things like date time, formfeed, and start the cycle again for the next page... I think a little optimization is in order. I tried rearranging the windows to put header on top, but the Mac has it's own internal order it is concerned with. Amazing how much time 5 formsucks and 5 formfeeds add to the print time..

I was impressed with the Imagewriters ability to actually *do* a formsuck. Most single tractor printers can't easily. According to the manual there is a wealth of things the beastie can do. It also seems too have prodigious print buffer.

Subject: Quickdraw bug?

There seems to be some sort of asymmetry in the ellipse drawer. From within MacPaint, set the black pattern and toggle into FatBits mode. Draw 3x5 pixel and 5x3 pixel filled ellipses. One will be a rectangle and the other will have corners chopped. The effect is most noticeable when drawing long narrow (3 pixels) horizontal ellipses.

Subject: Finder bug

After the Finder repairs your disk, it is confused about where the icons go in the disk window. In particular, if you select "clean up" the icons get bumped up to the very top of the window, instead of leaving a little border. Rebooting takes care of the problem.

This occurred under the following circumstances: after working with the Mac for a while I began to notice that the Finder was taking a LONG time to start up after an application quit (it seemed to be going back and forth between two tracks several times), and that MacWrite documents (both existing and newly created ones) were being shown with a plain document icon (not the document with lines of text). Then after doing some folder rearranging, the Finder said there wasn't enough room on the disk to store the changes (even though the disk window said 32k). I rebooted (I think), and the Finder repaired the disk, which cured everything--except the icons were put in the wrong place by "clean up", and rebooting again solved that.

Subject: Interfacing other disk to a mac

I just attended a Mac developer's seminar put on here by Andy Hertzfeld of Apple. I (think?) that these are being put on for the various consortium schools (has anyone else been to one?)

It was very worthwhile, as much for "fokelore" as for hard information; if you're offered the chance to attend, I'd recommend it.

Anyway, one of the most interesting aspects was gaining an appreciation of the entire driver/file system structure, and how the design makes interfacing other disks or file servers easy.

Basically, as I understood it, both the generic disk driver and file system driver, in addition to their normal (Apple supplied) routines have "exits" built-in, at appropriate places, for other (non-Apple supplied) versions of the routines for non-Apple disks. It's designed in such a way that the disk can either be "dumb" (analogous to the existing floppy) where the disk can only return sectors, or "smart" in the sense that the disk is really a "file server" which is passed file names and logical read/write requests in which case the Mac doesn't do directory processing locally. Apple's assumption for "big" hard disks is that they will be of the "smart" variety. For the Sony floppy, the Mac caches the entire directory in memory, since the memory requirements are nominal (they stated about 300 bytes). However, for a large hard disk sitting on one of the 422 ports, the assumption is that it is of the "smart" variety which is passed logical requests so that the Mac doesn't need to process locally the directory information.

What is interesting about this approach is that it would seem to make using "big" host computers as file servers a relatively easy task, although admittedly you'd be constrained by typical serial line rates of the host (e.g., 19.2 Kbit/sec) - the problem is the typical hosts - vaxen, 20s, etc. - not the Mac. However, for bulk file storage this may not be as serious a problem. What's fantastic about this approach is that above the level of the file system such a server looks identically to a local disk; files on the host server appear as icons, and the host appears as just another disk.

The seminar didn't go into any more details. However, I intend to follow up this information and see where it leads. It was clear from the presentation that Apple gave a great deal of thought about handling a wide variety of disks and file servers cleanly and uniformly, and that someone interfacing a "brand x" disk is definitely not at a disadvantage to Apple in terms of interfacing cleanly and uniformly to the Mac os.

WHY WE HAVE ONLY 400K ON OUR DISKS

The Mac was designed to use the fabled "Twiggy" drives. These drives, designed for the Lisa computer, use 5 and 1/4 inch diskettes, store 840K by using both sides of the diskette surface, and have a reputation for being unreliable.

Halfway through the Mac project, they decided to go with the fancy new Sony 3 and 1/2 inch drives for a number of reasons which can only be guessed at. I suspect that influencing factors included:

* Sony diskettes could store the same ammount of data as the Twiggy drives
* Sony hardware is superb
* Sony hardware is cheap
* The diskette's physical format was becomming a standard

This design change was made late in the game -- Apple had already made the molds for the Mac cases with the larger cut-outs for the Twiggy drives. If you look at the photos on pages 128 and 130 of the "Premier" issue of Macworld, you'll see Macintoshs with the larger cut-outs.

The only problem was that Sony couldn't make double sided drives in quantity, so we're stuck with single sided, 400K drives for a year or two.

Back-up Your Floppy with Diversi-Copy™

A New Breakthrough

Diversi-Copy will copy unprotected floppy disks faster and more easily than any other copy program.

Don't get burned by a bad disk!

Back-up your disks with Diversi-Copy.

Verifies Every Byte

Diversi-Copy checks every byte written on the disk, so you know your copies are good.

Shows Motor Speed

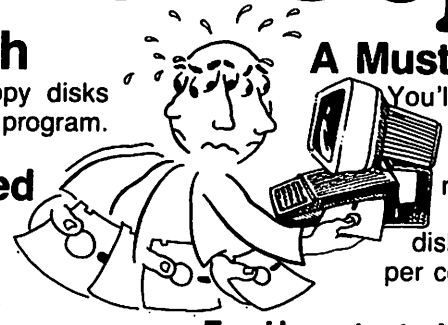
Diversi-Copy displays motor speed on each track while making a copy, eliminating a major source of disk errors.

Formats Data Disks

You can use Diversi-Copy to format data disks for ProDOS, DOS 3.3, Pascal, or CP/M (18 seconds per disk).

Mass Production

Diversi-Copy can mass produce 1 disk every 18-20 seconds, faster than most duplication machines (may require extra 128K card for full disks).



A Must For The Apple //c

You'll be amazed how much easier it is to make back-ups on the new Apple //c. Diversi-Copy makes copies without all those annoying re-insertions of the disks. You'll save over 2 minutes per copy, and save your sanity too!

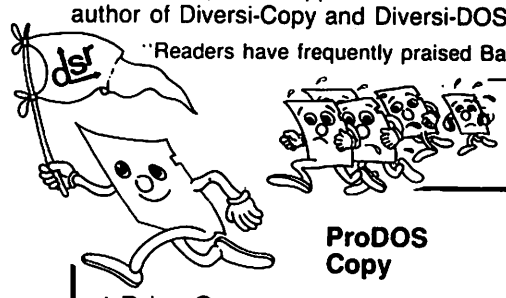
For Unprotected Disks

Diversi-Copy will copy all unprotected Pascal, CP/M, DOS 3.3, and ProDOS disks. It can't copy protected program disks, but it usually will copy data disks produced by these programs. Works on Apple //c, //e or II+ compatible computers.

We Back You Up Too

Mail and telephone support is available from Bill Basham, author of Diversi-Copy and Diversi-DOS.

"Readers have frequently praised Basham's support."
—*Softalk Magazine*



	ProDOS Copy	Diversi-Copy*
1-Drive Copy (50% Full Disk)	172 sec. 18 insertions	36 sec. 2 insertions
1-Drive Copy (100% Full Disk)	172 sec. 18 insertions	44 sec. 4 insertions
2-Drive Copy	80 sec.	33 sec.

* On 128K Apple //e or //c

Also From DSR, Inc.

Diversi-DOS™ Still The Best!

The top-rated DOS 3.3 enhancement program. Speeds up read/write of BASIC, Binary and Text files. DOS mover frees 10K additional memory. Includes new insert/delete mode, improved BASIC listings, keyboard MACROS, wildcard filenames, text file printer, keyboard/print buffers, and MORE! Works on Apple //c, //e, or 64K II+.

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For information, call 815-877-1343.
Disks normally shipped within 24 hours.
Sold by mail-order only.
Price includes 1st class or foreign airmail.
Return in 30 days for full refund if not totally satisfied!
FREE: Dogfight II arcade game, by Bill Basham included on each disk.

☐ Diversi-Copy. $30
☐ Diversi-DOS. $30

dsr

Diversified Software Research, Inc.
5848 Crampton Court
Rockford, Ill. 61111

Name: _____

Address: _____

City: _____

State: _____ Zip Code: _____

Visa/MasterCard, C.O.D., or personal check accepted

Card #: _____

Expiration Date: _____

NOTE: All documentation is contained on the disk.

EYE ON INDUSTRY

Al Guthrie

Apple II Forever.

The "Electronic Cottage" is a step closer with the Apple Communications Protocol Card ($700). The new device allows the Apple II to communicate with IBM mainframes and to act as a remote work station in an IBM network. The card is software configurable to a variety of protocols by means of software emulators priced at $300 each.

Sounding Off.

Cricket,a sound synthesizer by Street Electronics ($175) features six channels of music or sound effects and a natural sounding female voice. The package includes a built-in speaker, volume control, headphone jack and four software programs including a clock utility that provides the time and date.

Voice Box by The Alien Group comes in three versions: Model 3m ($129) plugs into any Apple slot; Model 3i ($219) acts as a peripheral, so that software that normally works with a printer can produce speech; Model 3s ($269) connects through a serial interface and can be instructed to produce speech from the text it receives, or to simply pass the text on to another device such as a printer. All models produce speech from text, adding inflection automatically or according to your instructions. They have an unlimited vocabulary and can speak in a male or female voice.

Words and Pictures.

The Paper Tiger Returns. Dataproducts Corp, who bought out Integral Data Systems, has introduced a new printer line called the Paper Tiger/8000 series. The two low-end printers are the 8010 ($649) 80-column version and the 8020 ($849) 132-column version. The advertised print speeds for both models are: 180 cps (draft); 90 cps (text), and; 30 cps (letter quality). The two high-end printers, the 8050 and 8070, will support color printing and print speeds ranging from 35 to 400 cps. All four printers use a staggered 18-wire printheads.

The Epson JX-80 ($800) can print up to seven colors using a four-color ribbon. It can print graphics to the same scale horizontally and vertically, allowing accurate reproduction of the screen image.

The HP LaserJet printer ($3495) may be your first look at the future. It can print eight pages per minute with the print quality of a daisywheel. Not currently available for the Apple, but based on a Canon printer mechanism which Apple is also using for its page printer. This may be where all personal computer print technology is heading.

The Mitsubishi Video Printer ($390) was originally intended to allow reproduction of individual frames from any TV or VCR, but it is said to work with any video output, presumably including the Apple. You simply plug the video out cable into the Video Printer and plug the printer into your monitor. Then, whenever you see something on the screen that appeals to you, just press the print button and get a 16-level monochrome print in 15 seconds. the Video Printer is not intended to replace a regular printer. It requires special thermal paper at a cost of about two cents per copy.

Play It Again, Mac. Professional Composer by Unicorn, Inc. ($495), designed for the Macintosh, functions like a word processor, entering notes instead of characters. In addition to serving as a teaching aid it provides an alternative to manually copying musical arrangements. It is distributed by Unicorn and by the Apple University Consortium.

Move Over, Franklin.

Computer Technology International has released the Eve II (who will bite next?). They claim Eve is software compatible with both Apple DOS and CPM. It has dual processors (Z80A and 6502), 64K RAM, an internal disk drive, 80 cps dot matrix printer and the ever-popular eight expansion slots. All for $2195.

Eye On IBM.

Not strictly Apple news, but we all know that the Empire has the power to disturb the Force. There are reports that the IBM warehouse holds half a million unsold PCjr's. Will the recent price cut move them? There is also a rumor that some over-stocked dealers have tried to quietly dump the jr through used equipment dealers and found no takers. Could the Little

One spawned by the Big One be on it's way out? in the meantime the PC Portable turned out to be a Compaq look-alike. What's next? The betting is on a multi-user system with a UNIX operating system and three times the power of the PC/XT. Code named "Popcorn", it could be announced this year. Meanwhile, Mouse Systems of Santa Clara, CA is selling a Paint program that attempts to turn PC and its clones into a Macintosh look-alike for $125 plus a $300 mouse.

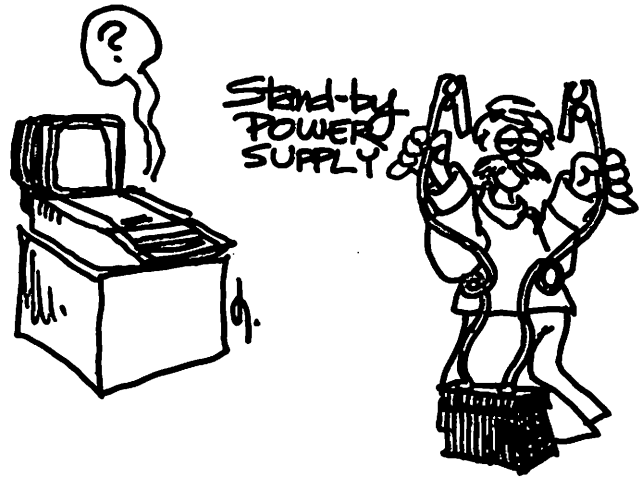
UNCLASSIFIED ADS

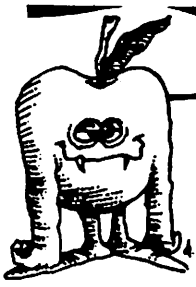
FOR SALE

Apple II+ with lowercase on screen + from keyboard, true inverse video, 16k language card, printer interface card, DC Hayes Micromodem II, 2 Apple disk drives with controller, Integer Language card, MX-80 Printer with 50 ft cable, Applewriter II, Joystick, paddles, Prodos (new-unused). Call Rob 537-0544 evenings $1500.

FOR SALE

Apple II+ 64K, 80 column, ul case, monitor, 2 disk drives, Epson MX-FT, joysticks, software. $1400/offer. Marshall Dickstein, days 256-7012, eve 677-8948/49.





northern illinois apple users group

1271 West Dundee Road, Buffalo Grove, IL. 60090

MEMBERSHIP APPLICATION

NOTE: Information obtained from this application is solely for the use of the NORTHERN ILLINOIS APPLE USERS GROUP (NIAUG). Membership lists will not be distributed to members or non-members.

PLEASE PRINT

[ ] Full Membership ($29.00) Includes $24.00 Annual dues + $5.00 initiation fee. Covers entire family; 1 Vote; all privledges. This rate applies to the following counties: ILLINOIS - Boone, Cook, DeKalb, DuPage, Grundy, Kane, Kankakee, Kendall, Lake, LaSalle, Lee, McHenry, Ogle, Will, Winnebago; INDIANA- Lake, Porter; WISCONSIN - Jefferson, Milwaukee, Racine, Rock, Walworth, and Waukesha.

[ ] Associate Membership ($23.00) Includes $18.00 Annual dues + $5.00 initiation fee. Covers entire family; No Vote; all privledges. This rate applies only to those persons living outside the above mentioned counties.

NOTE: Full or Associate memberships are for 12 Months, starting the month they are received.

[ ] Additional Harvest Subscription ($12.00). $12.00 annual fee, prorated to the number of months left on the Full or Associate membership. Covers one person; No Vote. (Must be a member of a family who have already paid for a Full or Associate Membership.)

NAME _____ PHONE (____) _____-_____

ADDRESS _____ COUNTY _____

CITY _____ STATE ____ ZIP _____-_____

If this is an application for an additional Harvest subscription, please fill in the following with the information about the Full or Associate membership.

NAME _____ PHONE (____) _____-_____

ADDRESS _____ COUNTY _____

CITY _____ STATE ____ ZIP _____-_____

Would you please take a few moments of your time to fill out the following information. This information will help us to get a better picture of what the needs of our Users really are.
Please check the type of computer(s) you have or are using.

[ ] APPLE II [ ] APPLE II+ [ ] APPLE IIe [ ] APPLE /// [ ] LISA

[ ] MACINTOSH [ ] APPLE COMPATIBLE [ ] OTHER _____

Benefits the group can provide for you _____

_____

_____

Benefits you would like to provide to the group _____

_____

_____

Comments _____

_____

_____

##########

TREASURER'S USE ONLY Do not write below this line!

Cash [ ] Amount $ _____.___ Check [ ] # _____ Date ____-____-____

Refund of overpayment: Check # _____ Amount $ _____.___ Initials _____

NUMERIC VARIABLES

```
10      LET A = 7.34
20      PRINT A
RUN     7.34
```

THE NUMBER "7.34" IS STORED IN MEMORY UNDER THE ADDRESS NAME "A".
(IT IS EASIER TO REMEMBER "A" THEN THE NUMBER OF THE ADDRESS IN MEMORY.)
"A" IS A NUMERIC VARIABLE. THE CONTENTS OF "A" CAN VARY.

```
10      LET A = 7.34
20      LET A = 5
30      PRINT A
RUN     5
```

RUN THE FOLLOWING PROGRAMS. CAN YOU PREDICT WHAT WILL BE PRINTED?

```
10      LET A = 5 * 7
20      PRINT A
RUN     -------

10      LET X = 4
20      LET A = 5 * X
30      PRINT X,A
40      PRINT X;A
50      PRINT "X,A"
RUN     ----------------------------------
        ----------------------------------
        ----------------------------------
```

STRING VARIABLES
(APPLESOFT)

```
10      B$="MOTHER"
20      PRINT B$
RUN     MOTHER
```

STRING VARIABLE NAMES MUST END WITH A DOLLAR SIGN ($).
THEY VARY IN THE SAME WAY AS NUMERIC VARIABLE NAMES.

```
10      B$="MOTHER"
20      PRINT B$
30      B$="FATHER"
40      PRINT B$
RUN     MOTHER
```

B$ IS A VARIABLE THAT NAMES AN ADDRESS IN MEMORY.CONTENTS OF ADDRESS
MAY CONTAIN ALPHANUMERIC CHARACTERS.

```
10      B$="1733 HUBBARD DRIVE"
20      PRINT B$
RUN     ------------------------------
```

STRING VARIABLES CAN VARY FROM 0 CHARACTERS TO 255 CHARACTERS.

```
10      R$=""          (NULL STRING)
20      A$="AAAAAAA.............255 CHARACTERS.......AAAAAAAAAA"
30      PRINT R$,A$
RUN
```

SIG BITS & BYTES
by Ken Falter

BUSINESS SIG

Meets on the fourth Saturday of every month at 10:00 am at:

Mount Prospect Public Library
10 South Emerson Street
Mount Prospect, Illinois

(One block east of the intersection of Elmhurst Road (rte. 83) and Central Road).

BEGINNERS SIG

The SIG continues to have two beginners' groups meeting. It is oriented towards helping "new" or "rusty" Apple users deal with the many questions, frustrations, confusions and "mistakes" that we all have made "in the beginning".

Attendees provide the direction for the meetings by the questions they ask and the topics they bring up. Experienced NIAUG members are the answerers and explainers.

NIAUG members wishing to join the SIG should call Guy Lyle at 312/359-1458.
NOTE: NIAUG membership is required.

LIBRARY SIG

The SIG will run this year's NIAUG new program contest (see other article elsewhere in this issue for further details).

For additional information on this SIG, call Joe Zeinz at 312/526-0575.

****

DISCOUNTS OFFERED TO NIAUG MEMBERS

Robert Burkhead of "Computer Outpost", 520 Wise Road, Schaumburg, Ill has offered a standard 10% discount on all computer products to NIAUG members. On the weekend of the NIAUG General meeting he will give a 15% discount. Special orders of goods not in stock, made on that weekend, will also be made at a 15% percent discount if a downpayment is made. To receive discounts you must show your NIAUG Membership Cards.

HELP WANTED

College student seeks summer work. Experienced in using the Apple II+, especially wordprocessing and data base management programs. Contact Chris at 392-7735.

CLUB NEWS

NIAUG PLANNING MEETING

CALL FOR LOCATION OF MEETING

AGENDA

AUGUST 4, 1984 bldng A, Harper College.

SPECIAL INTEREST GROUP (SIG) JAMBOREE

The August meeting will be devoted to presentations by existing SIGs and the forming of new SIGs. If you have wanted to a SIG formed around a subject dear to your heart or even see what other SIGs do, come out to August's meeting.

ADVERTISING

All members of NIAUG may advertise free of charge, in the form of unclassified ads, as long as the ad is not part of a commercial endeavor.

NIAUG Members may also advertise commercial ventures using an unclassified ad 1/2 page wide format at $3/issue/five line increment or use the regular box ads at the commercial rates.

COMMERCIAL ADVERTISING-
All ads must be prepaid and camera ready to the prescribed size as follows:

Full page	-7 1/2" wide X 10" high=	$55/issue
Half page	-3 1/2" wide X 10" high=	$30/issue
Half page	-7 1/2" wide X 4 3/4" high=	$30/issue
Quarter page	-3 1/2" wide X 4 3/4" high=	$16/issue
Eighth page	-3 1/2" wide X 2 1/4" high=	$9/issue

All ads must be received by the copy deadline for the given issue.

1984 SCHEDULE FOR THE NIAUG HARVEST

ISSUE MONTH	DEADLINE FOR ARTICLES/ADVERTISING
OCT	AUG 14
NOV	SEPT 11
DEC	OCT 16

THE HARVEST NEWSLETTER
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ARLINGTON HEIGHTS, IL.
60005.

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POSTMASTER-CONTENTS DATED
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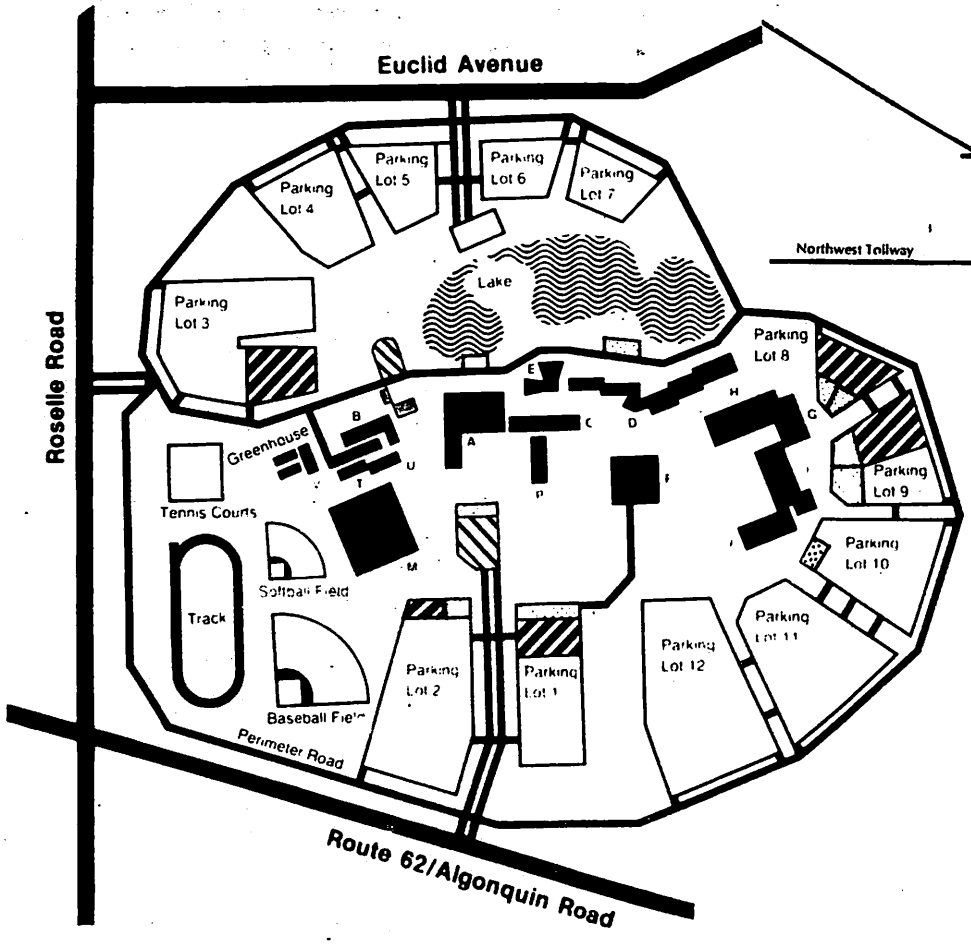
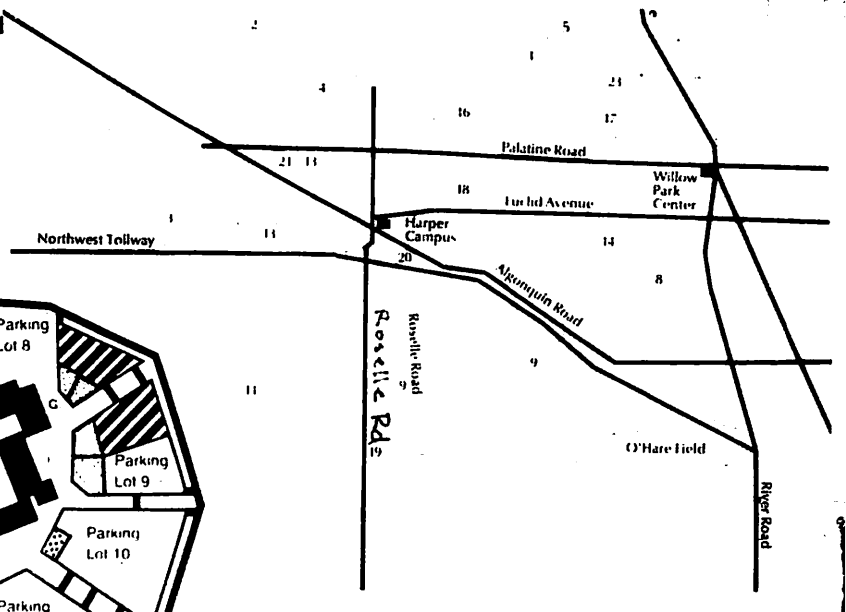
-FORWARDING REQUESTED
-ADDRESS CORRECTION REQUESTED





MEETINGS

Meetings are regularly held on the the second Saturday of each month unless otherwise noted in room E106 Harper College, Palatine, Il starting at 10:00am.